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ABSTRACT

Trends and issues likely to affect Kentucky higher education in the future are discussed along with recommendations of the Prichard Committee on Higher Education in Kentucky's Future. Projections pertaining to population, resources, social issues, inflation, and the change from goods production to production of services and the creation of knowledge are presented. It is suggested that three important elements to reform and improvement of higher education are an increased emphasis on: quality in higher education, creative leadership, and more effective use of financial resources. Issues and recommendations pertaining to quality include the following areas: higher education and the schools, admission policies, teacher education, remedial education, highly talented students, and a fund for academic excellence. Recommendations are made regarding the following academic programs: graduate programs, professional education, legal education, medical education, dental education, nontraditional students and programs, and professional enrichment. Additional recommendations concern: the faculty, research at the University of Kentucky and the University of Louisville, research at the regional universities and Kentucky State University, cooperation in research, public service, higher education finance, and the financial needs of higher education. Prerequisites to quality are identified, including promoting diversity among institutions and using flexible teaching methods to meet the needs of students. Two minority opinions on legal education are also presented. (SW)

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IN PURSUIT OF EXCELLENCE

The Report of The Prichard Committee on Higher Education in Kentucky's Future

to the Kentucky Council on Higher Education

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Edward F. Prichard, Jr.
Chairman
Prichard Committee on Higher Education in Kentucky's Future

"We trust that the recommendations of our committee will send out a signal to the higher education community for unity of action in the face of unprecedented challenge."

September 18, 1981

Mr. William H. McCann
Brown, Sledd, and McCann
300 West Short Street
Lexington, Kentucky 40507

Dear Mr. McCann:

On behalf of the Committee on Higher Education in Kentucky's Future, I have the honor to transmit to you the final report of the Committee. Perhaps you and the Council will forgive a personal word or two as we leave this report in your hands.

The zeal, devotion, and hard work of the members of this Committee have exceeded any I have ever experienced in all the time I have been associated with higher education in Kentucky. This report is not the work of the Chairman, nor even of the dedicated and competent staff. It is the work of the members of this Committee, who have worked individually and together to achieve this result.

Perhaps one or two observations will serve to point up the submission of our recommendations.

First, this report does not confine itself to a request for additional financial support of higher education. We believe that additional financial support is indispensible for a quality system of higher education, but money is not the sole means of attaining high quality. We realize that additional financial support cannot be attained in a single fiscal year or a single session of the legislature; it will require a long-term commitment for Kentucky's leadership to achieve this goal over a definite period of time—perhaps a decade.

One aspect of our recommendations for financial support can be commenced immediately, that is, the Fund for Academic Excellence. It may be the most important single recommendation of our Committee report. If it is promptly commenced and carried out, we believe it can exert a transforming influence on the tone and quality of all our state institutions of higher education, and we urge immediate consideration for its beginning in the coming session of the General Assembly.

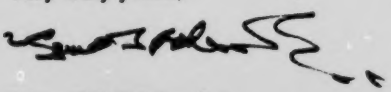
We regret that, with respect to the pruning of unnecessary programs and the elimination of unnecessary duplication in various academic areas, we have not been able in the time available to us to make more specific and definite recommendations, although we have pointed the way to policies that can approach these results. We do believe that in the areas of professional and graduate education there is an imperative necessity for strong action by the Council to deal with these matters firmly and objectively. And in general it has been our belief that where enrollments in these areas are excessive, the consolidation of institutions is preferable to restriction of programs and enrollments across the board, primarily because of its efficiency and cost effectiveness.

We are confident that these recommendations will receive the earnest consideration of the Council, the Governor, the General Assembly, and the universities themselves. It is vitally important that in this period of financial stringency and external pressure that the house of higher education not become divided against itself. We trust that the recommendations of our Committee will send out a signal to the higher education community for unity of action in the face of unprecedented challenge.

It has been a gratifying and nobling experience to have the opportunity that you and the Council have afforded me to serve with the splendid membership of this Committee, and I shall cherish that experience as long as I live.

With assurance of great respect, I remain,

Very truly yours,



Edward F. Prichard, Jr.
Chairman
Committee on Higher Education
in Kentucky's Future

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Introduction

In October, 1979, the Council on Higher Education resolved that a committee should be formed to examine the trends and issues likely to affect Kentucky higher education in the future. Thirty Kentuckians, representing varied interests and vocations as well as different regions of the Commonwealth, were appointed for this purpose and first met in June, 1980, as members of the Committee on Higher Education in Kentucky's Future. (When the Committee presented this report to the Council on October 8, 1981, it honored its chairman, Edward F. Prichard, Jr., by renaming the Committee the Prichard Committee on Higher Education in Kentucky's Future.)

The charge to the Prichard Committee on Higher Education in Kentucky's Future was to identify those critical issues that would, in all probability, affect higher education during the coming decade.

This farsighted charge meant that this Committee could deliberate comparatively free from immediate concerns. We were able to build a broad framework of suggested concerns and reforms intended to guide more detailed decisions to be made by the Council, the boards of regents or trustees of the universities and colleges, the governor, the legislature, and others who are responsible for the type and quality of higher education offered in our state. As we interpreted it, our charge was not to attempt to develop solutions to current issues such as the mandate from the U. S. Office for Civil Rights calling for further desegregation of Kentucky's public higher education system, the suggestion that some Kentucky universities be merged or eliminated, or the immediate budgetary crisis.

It was easier to remove immediate concerns from our deliberations than it was to ignore unsolved problems of the past. Such problems are too firmly entrenched in Kentucky's system of higher education. Kentucky's system of public and private colleges and universities did not grow up according to a careful and systematic plan. Rather, like most other such systems, it expanded and changed in response to the immediate needs and political demands of past generations. This existing system—including the unresolved issues and unsolved problems inherent to it—is where we began our study and subsequent

suggestions for reform and for improving the quality of Kentucky higher education. While our principal concern has been with Kentucky's public colleges and universities, we affirm that the private sector of higher education is a valuable resource for the Commonwealth and have addressed concerns in this area when appropriate to do so.

We studied relevant reports and publications; examined our own experiences and those of peers and colleagues; and talked with faculty, administrators, and students in Kentucky and other states. As a full committee, we met together for a total of fourteen days, and three subcommittees spent another ten days each in formal meetings.

The report that follows does not provide large amounts of data nor is it structured upon sophisticated research methodology. Frequently, both have been included in our considerations, but predominant in this report are the common wisdom acquired and shared among the members of this Committee and the reflected concerns of numerous Kentuckians who worked with us and whose lives will be affected by the issues and trends discussed herein.

Our proposals involve costs, monetary and human. Sacrifices must be made. Reform is needed. We do not claim that money alone will ensure quality, but we are certain that without more financial support, there is no hope for increased quality. If additional financial resources are to lead to higher quality, it must come through a system that is real and not rhetorical, thoughtfully planned, and judged by rigorous performance evaluation. We believe that with firm, positive, and objective leadership from the Council on Higher Education, the universities and colleges, and state government, quality can be enhanced.

We realize that institutions are slow to change even when they recognize the necessity for change. However, we have found that Kentuckians have high expectations for their higher education system. Kentuckians do not want mediocrity. We believe they are willing and able to meet the challenges the future holds for Kentucky education. Although the ideas we include in this report do not speak to every issue or reflect every viewpoint, we hope they will be useful to those who plan now to use the resources of our state more effectively and to enhance the quality of higher education.

The Prichard Committee
On Higher Education in Kentucky's Future

Acknowledgements

IN SUCH ENDEAVORS as those of the Prichard Committee on Higher Education in Kentucky's Future, the time and talents of many people are necessary. To the many who made our work valuable and enjoyable, we offer our most sincere thanks.

A special word about our staff is needed. Many of us have been associated with higher education and the Council on Higher Education for many years. The Council can take pride in its staff for the cooperative spirit and enthusiasm exhibited toward our work. We are grateful to Executive Director Harry M. Snyder for his unending support of our effort.

The work of Robert F. Sexton, Deputy Executive Director of Planning and Policy Studies, and his associates, Robert L. Barnett, Director of Policy Studies, and Randall W. Dahl, Associate Director of Policy Studies, for which it is difficult to express adequate appreciation, was above and beyond the call of duty and brought inestimable value to our efforts.

The Council's other deputy directors gave freely of themselves, their expertise, and the time of their staffs. We particularly appreciate the support provided by Roy P. Peterson, Deputy Executive Director for Academic Affairs, and his staff, Larry A. Fowler, Michael J. Gardone, E. L. (Angie) Hebbeler, Elizabeth C. King, and Ronald A. Mann; Edward A. Carter, Deputy Executive Director for Institutional Finance, and his staff, Gary L. Faulkner and J. Kenneth Walker; and Gary S. Cox, Deputy Executive Director for Governmental Affairs. We also appreciate the efforts of the Council's executive office staff, Cathy L. Cole and Don Mullis, and we thank Joseph Burgess, the Council's Coordinator of Public Information, for assistance with publishing this report.

This report could not have been prepared without the help of the Council's secretarial staff. In particular, we are grateful to Phyllis Waits, whose quiet devotion to the preparation of this report was indispensible. We also appreciate the assistance of Sharon Cheak, Teresa Hyatt, Martha Robinson, and Sandy Waits.

Paul Borden, Executive Director of the Kentucky Higher Education Assistance Authority (KHEAA), and Bill Lunceford of the KHEAA staff made important contributions to our work. We also acknowl-

edge the time and energy of John Frazer, Executive Director of the Council of Independent Kentucky Colleges and Universities.

We talked with more faculty, administrators, and students at Kentucky's colleges and universities than can be mentioned by name, but we owe them all deep gratitude.

We asked many others for advice and counsel, and wish to recognize them for their contributions. They included the following: Robert O. Berdahl, University of Maryland; John M. Bevan, College of Charleston; James M. Brockway, Urban Studies Center, University of Louisville; K. Patricia Cross, Harvard University; R. Morton Darrow, the Prudential Insurance Company of America; Russell Edgerton, American Association for Higher Education; and John Folger, Vanderbilt University.

Also, we thank Carol Frances, American Council on Education; Lawrence K. Lynch, Transylvania University; Peter Meyer, Queens College; Douglass Nunn, Urban Studies Center, University of Louisville; Michael O'Keefe, Carnegie Foundation for the Advancement of Teaching; Jack W. Peltason, American Council on Education; Edith Seashore, private consultant; Verne A. Stadtman, Carnegie Foundation for the Advancement of Teaching; and Robert Straus, University of Kentucky.

The Prichard Committee
On Higher Education in Kentucky's Future

I
The Expectations and Needs Of the Future

IN THIS REPORT the Prichard Committee on Higher Education in Kentucky's Future attempts to define the level of quality Kentuckians should expect from their system of higher education and to make suggestions about how to achieve it. However, because Kentucky and the larger society are entering an age of limits, we are faced with problems for which experience has not prepared us. The acceptance of limits can lead to a mood of pessimism. This Committee is determined that pessimism shall not breed limited thinking, restricted creativity, and meanness.

The majority of the nation's colleges and universities, like most of other contemporary institutions, were built in the prosperous quarter century after the end of World War II. Decisions to allocate public resources, although not without conflict, were made in the context of the dominant metaphor of the period, John F. Kennedy's "rising tide that lifts all boats." In an unprecedented "golden age" for education, the nation rushed to build and make accessible institutions and programs for a tidal wave of students of all income levels, races, sexes, and levels of academic preparation. In the 1960's such growth was enormous:

> Colleges and universities spent 21.5 billion dollars for buildings and improvements during the decade . . . . 702 new institutions were established between 1960 and 1969. Of these, 534 (3 out of 4) were public institutions. That statistic says a great deal about the economic condition of state governments in the 1960's. Some of them had built up considerable reserves during World War II; they also participated in the general prosperity of the country. They had the fiscal capacity needed to expand higher education. More importantly, such expansion seemed to be supported by the general public.[1]

---

[1]Verne A. Stadtman, "Happenings on the Way to the 1980's," in Philip G. Altbach and Robert O. Berdahl, *Higher Education in American Society* (Buffalo: Prometheus Books, 1981) p. 103.

During the post-war quarter century, Kentucky also built an extensive system of public higher education in response to the needs of the state and nation for advanced education and trained manpower. Those who participated in the process may have different recollections, but in restrospect, it appears that the division of the comparatively plentiful financial resources was relatively easy. Buildings went up to house new masses of students. Bright and ambitious young men and women were enticed by new graduate programs. New and diverse programs, new laboratories, new hospitals, new universities, and, indeed, new empires were born. Notwithstanding the growing pains and stresses of an adolescent system, powerful universities with powerful leaders and constituencies flourished, watered by grand visions of the future.

Kentucky and the nation are now at a turning point. The "plates" of history are shifting from a period of unlimited resources and prosperity, which shaped our values and political judgments as well as our plans, to an era in which we must cope with a scarcity of resources and the necessity of limits. According to social analyst Daniel Yankelovich, the year 1973, with OPEC price increases and the realization of our nation's dependence on oil from the Middle East, probably should be taken as a watershed year, sharply dividing the second half of the twentieth century. This quarter century, "the millennial quarter century," to use Yankelovich's expression, will most likely see a reversal of the nation's ability to spread the wealth. We can expect less from our physical environment, our economy, and our government. Hard choices, avoided in a time of expansion, are now unavoidable.[2]

In Kentucky, as elsewhere, a crisis in decision making is upon us. An "era of limits" is a particularly difficult period for higher education—a truly double-edged sword—because the need for better educated, more talented and productive citizens becomes increasingly urgent at the very time the resources and energy to provide appropriate education and training become increasingly scarce. Progress is most needed precisely when it is most difficult to accomplish.

The challenge in an age such as ours and the challenge that this report attempts to meet is to accept necessary limits without accepting limited thinking and creativity. Scarcity of resources could cause state authorities to adopt policies that constrict the best impulses of higher

[2]Daniel K. Yankelovich, *New Rules: Searching For Self-Fulfillment in a World Turned Upside Down* (New York: Random House, 1981).

education institutions and inhibit Kentucky's own need for creative action. If revenue must be allocated more sparingly, the state may become overly regulatory, with increased tension between the needs of the state for a smoothly functioning, effective, and carefully planned system and the needs of the universities to inspire faculty and staff to new levels of achievement. As one university president has pointed out, the problem is not how to keep faculty members and universities from expanding and enlarging programs but how to encourage them to be creative when morale is so low.

A further challenge is to make critical choices with an accompanying sensitivity to the needs of Kentucky's particular population groups and its different regions, on the one hand, and with an appreciation of the need to achieve the greatest good for the greatest number of Kentuckians, on the other. Damaging tensions between the state and various institutions, their boards of trustees and regents, presidents, and faculty may increase. Institutions might develop so autonomously that the larger system is thrown off balance and the needs of all Kentuckians are not met. On the other hand, the state's authority might become so pervasive that it crushes necessary academic traditions of autonomy and stifles new and original ideas. Leadership must avoid these extremes and ask institutions to allocate resources in such a way that quality in all institutions is improved while the greatest public good is achieved.

Future Trends Affecting Kentucky Higher Education

This Committee believes that the broad trends that will shape society and the requirements of higher education in the years to come can be identified. Some come from national, even global, shifts in population, resources, and knowledge; others are more specific to Kentucky. However, it is important to realize that trends, even when well established and agreed upon by all, are not infallible predictors.

Debates about future trends are more frustrating than helpful and, according to eminent sociologist Seymour Martin Lipset, are not to be "resolved in the foreseeable future by more data, better theory, or more sophisticated arguments."[3] Unforeseen developments are always

[3]Seymour Martin Lipset, Editor, *The Third Century: America As a Post-Industrial Society* (Stanford: Hoover Institution Press, 1979) p. 34.

a possibility. For example, projections of enrollment declines in universities and colleges made for the 1970's proved inaccurate and forced planners to look for resources they had thought would not be needed. No one can say now with certainty that there will not be increases in college enrollments if the economy suffers drastic reversals or if unforeseen factors influence population growth. Nor can anyone say with certainty that conservation and technology will not improve our energy condition and, thus, the American economy and the resources available to higher education. The trends and projections mentioned in this report should, therefore, be considered as factors bearing on probable needs and obstacles that higher education, like other institutions, must be prepared to face.

It is understandably difficult for leaders to keep future trends in sight when immediate problems obscure the view. Our examination of the future of higher education has been in constant conflict with immediate crises. Soon after this Committee's appointment in the summer of 1980, the Kentucky Department of Revenue announced a massive shortfall in state revenues, a shortfall that occurred again in 1981. University and financial aid funding was cut unexpectedly, and a crisis atmosphere prevailed. When we held our first meeting, Governor John Y. Brown, Jr. brought another immediate concern to the fore: the need to make higher education more efficient. At the Governor's request, the Council on Higher Education later contracted for a thorough study of the management of public higher education. (The study is being done by Price Waterhouse and Company in association with MGT of America; completion date is spring 1982.) Then, in January, 1981, after we were several months into our task of identifying future trends, the U. S. Department of Education's Office for Civil Rights asked Kentucky to submit a plan for eliminating vestiges of segregation from its system of public higher education. Because that plan was due in sixty days, we came to sympathize with the difficulties leadership has in keeping its eyes on more distant issues.

Despite our limited ability to predict the future and despite our difficulty in standing back from absorption in the present, the following underlying trends were clearly identifiable. They are supported both by extrapolation from large bodies of data and by the analyses of some of the nation's best minds and will provide the context for planning and operating higher education in the nation and in Kentucky in the years ahead.

Population. By the year 2000 the world population will have increased by more than 50 percent. A sizable amount of this increase will be in the less developed countries, with somewhat less dramatic increases occurring in well developed countries such as the United States. Nonetheless, Kentucky's population will increase at a slightly more rapid rate than that of the nation. This difference in growth patterns can be traced primarily to Kentucky's relatively high net migration rates. (More people move to the state than leave it.) There will be approximately one million more Kentuckians in the year 2000 than there were in 1970.

Figures from the Urban Studies Center at the University of Louisville suggest some significant shifts in the state's and nation's population characteristics. First, the proportion of people over sixty-five will increase more rapidly than will that of younger age groups. This means that the labor force is shrinking relative to those who are past their most productive years. However, the older generation is likely to continue to demand services and resources from an economy manned by an ever smaller proportion of workers. Second, there will be a sharp increase in the fifteen- to twenty-four-year-old age group by the year 1990, with an especially noticeable rise in the nonwhite population. Nationally, the nonwhite portion of the population aged fifteen to twenty-four will increase from 13.3 percent in 1970 to 18.7 percent in 2000. In Kentucky the nonwhite portion of this age group will increase from 7.9 percent of the state's youth population to 15.5 percent.

Resources. The central conclusion of *The Global 2000 Report to the President,* written in 1980, was that if present trends continue, the world in 2000 would be "more crowded, more polluted, less stable ecologically, and more vulnerable to destruction than the world we live in." As the population grows at the same time finite fuel resources shrink, the "carrying capacity of the earth in sustaining the possibility for a decent life for the human beings that inhabit it" will be taxed beyond its limits.[4] The international pressure for energy resources will be one of the dominating concerns upon which all international and national political and economic

[4]*The Global 2000 Report to the President: Entering the Twenty-First Century,* Volume One (Washington, D.C.: U.S. Government Printing Office, Superintendent of Documents, 1980) pp. 1-5.

decisions turn. Although some of the world's fuel resources (coal, gas, oil shale, tar sands, uranium) are theoretically sufficient for centuries, they are not evenly distributed and prices will continue to rise and further investment in exploration will be needed. The world's wood supply, still the major fuel source for the majority of the world population, is disappearing at the rate of an area about half the size of California each year. By 2000 about 40 percent of the current forest cover in the less developed countries will be gone. The loss of this fuel source will cause severe energy and food shortages, further widening the gap and increasing the threat of hostility between the "haves" and the "have nots." In addition to energy shortages there are strong possibilities of worldwide water shortages. Within the next twenty years the southwestern United States and parts of Florida are predicted to face such serious water shortages that large scale population, agricultural, and commercial shifts will have to take place. Such possibilities increase the difficulty of forecasting population for the southeastern states, including Kentucky, that will still have water and arable land.

Social Issues. More people with fewer resources will produce increased tension between and among age groups, economic sectors, racial groups, and less developed and more developed nations. As Arthur W. Combs wrote in "What The Future Demands of Education":

> The major problems we face today and the primary problems we shall face in the future have to do with learning to live effectively with ourselves and other people. Problems of poverty, ecology, pollution, overproduction, food distribution, use of energy, war and peace, health, aging, crime and violence, terrorism, and human rights are all essentially social.[5]

Inflation. Although public policy decisions may be able to bring about the radical change that will halt inflation, it can be argued that inflation is inevitable, regardless of public policy, because of declining resources and increasing population pressures. Lynch has

[5]Arthur W. Combs, "What the Future Demands of Education," *Phi Delta Kappan*, January 1981, pp. 369-372.

predicted continued high inflation throughout the present decade in Kentucky.[6]

The Change from Goods Production to Production of Services and the Creation of Knowledge. The improvement of economic productivity in the United States will depend on policy decisions and international conditions rather than upon the historical largess of America's natural resources. As Lynch points out, goods production is declining relative to service production in the United States economy.[7] The implications of this trend for Kentucky are not certain because they depend in part on the continued movement of Kentucky's economy from an agricultural and mineral production base to a base of service, information, and knowledge. Again quoting Lynch:

> Kentucky is expected to outgrow the U. S. in every industrial category except agriculture, where employment is expected to decline at a faster rate than in the U. S. The fastest growing industries are mining, services, construction, and trade. The growth in trade and services means the composition of employment will become more oriented toward service production than goods production. (Or more based on technical knowledge.)[8]

Among the increasing number of service positions, sales and management positions alone are expected to provide almost 12,000 new jobs yearly in Kentucky. The move toward service economies suggests a need for broad education rather than that geared to specific occupations. It also suggests consideration of expanded continuing education to help workers acquire additional information needed at several points in their careers so they may keep up with the vast technological change forecast for the future.

The amount of information confronting society increases more and more rapidly. We will increasingly become a "knowledge-based" society, with control of and creation of knowledge as the

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[6]Lawrence K. Lynch, "The Economic Environment of Higher Education in Kentucky in the 1980's," May 1980 (paper prepared for the Committee on Higher Education in Kentucky's Future) p.3.

[7]Ibid., p. 3.

[8]Ibid., p. 5.

primary activities. According to Peter Drucker, writing in *Managing in Turbulent Times*:

> The developed countries can only hope to maintain their standard of living, their standard of education, their leadership position, if they put to work productively the only resource in which they have a distinct advantage: their ability to keep young people in school for long years and qualify them for knowledge work . . . . This implies that in all developed countries scholastic standards and demands are likely to go up in the next decades.[9]

Such knowledge is essential, not only for continued and improved productivity, but also to help solve critical social, economic, and technical problems and to create an enlightened citizenry that can understand the implications and gauge the uses of technology. It is essential that such knowledge be distributed among the population to whatever extent possible. Some analysts foresee the rapid expansion of technical knowledge dividing the nation into a technologically knowledgable ruling class and a technologically illiterate and powerless lower class. According to a vice president of the Xerox Corporation, "Those who just get by in one culture do not survive in subsequent cultures. Those who know vocabulary and grammar today must be taught coding, programming, flow diagrams, and the syntax of artificial intelligence."

Pressure on Institutions. In stringent times institutions become less supportive of individuals and people become pessimistic about the value of institutions:

> During the current era of convulsive change institutions are increasingly viewed as incompetent, irrelevant, and illegitimate, and are being attacked, circumvented, revamped, and replaced. But since institutions are highly interrelated, interlocking systems, changing them to meet new circumstances and requirements necessitates further change, which in turn requires still further change in an endless sequence.[10]

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[9]Peter Drucker, *Managing in Turbulent Times* (New York: Harper and Row, 1980) pp. 141-142.

[10]Edward Cornish, *The Study of the Future* (Washington, D.C.: The World Future Society, 1977) p. 4.

Although there can be debate over what specific trends led to it, there is general agreement that the nation and Kentucky are at a turning point. This Committee is persuaded that this is so by observations that the social, economic, and political fabric is shifting from one era into another. In the midst of this shift, most people, including the members of this Committee, feel a certain instability. People grasp and interpret with difficulty the changes that are thrust upon them. "To many," says pollster Daniel Yankelovich, "this new reality is not obvious at all, and that tells us a great deal about the instability of the present moment in American life."[11]

Quality Education for a Changing Future

Kentucky is now confronted, following a period of growth, with the need for a maturing system of higher education that reaches for increased quality in a demanding future. The system is challenged. The extravagances of the recent past, not the vigor, creativity, and vitality, must be put aside as we make critical choices.

A crisis in decision making may be upon us. This era of limits will, we believe, require sophisticated understanding and great sensitivity. Answers are obscured by the central tension of this age, the tension caused when the aspirations and visions of immediate past years confront the reasonable expectations of the future. Nevertheless, decisions must be made.

> The unprepared mind plays tricks on itself. People take note of the unchanged economic climate but assume it is transitory and will soon be replaced by a more benign normalcy or that it is a result of some villainy practiced by government and big business and can be corrected once the blame is fixed and the villains are punished. . . . Americans have yet to reconcile themselves to the new, unwelcomed conditions. They have yet to find strategies for coping, based on lowered economic expectations. We are just beginning to comprehend our new economic situation and we are not sure what concessions or sacrifices it entails.[12]

Shifting terrain makes foresight difficult, but it is obvious that the demand for knowledge and expertise will increase with the need to

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[11]Yankelovich, p. 189.

[12]Yankelovich, p. 190.

solve critical social, economic, and technical problems. Society and Kentucky will need better trained minds to expand and increase productivity. The demands of daily living will increase. The need for immediate and complex decisions, such as those related to the development and use of nuclear power today, require greater knowledge. Other predicted trends in population, the availability of resources, and the economy make improvements in higher education imperative. This report focuses on that issue.

Conditions explicit in the American national character suggest that Americans will not easily accept the limited future that trends in population growth, resource depletion, and social and economic pressures threaten to create. Americans continue to have high expectations of progress, both for themselves and the nation as a whole. This Committee is convinced that a serious search is underway for a release from dependency on certain limited resources and that higher education will be needed as never before to provide the knowledge necessary to preserve and enhance the use of finite resources. As the Carnegie Commission reports, an American renewal may be underway and higher education is vital to it. Despite a tendency of people to become pessimistic about the value of institutions, Americans still look to education as the road to a better life and as the source of information and talent needed to solve problems.

We believe that such faith is well placed, and we believe, as does the Carnegie Commission, that higher education is:

> . . . highly dependent on the national mood. It has advanced most rapidly when there has been a convergence between national aspirations and the capabilities of higher education. . . . Such a period occurred in the decades after the Civil War when the land-grant movement contributed to agricultural and industrial advances. Another such period came in the 1960's, with higher education contributing to the responses to Sputnik and the civil rights movement. The vitality of higher education depends greatly on its opportunity to respond to the needs of the nation as expressed through the political process.[13]

We set forth in this report a program for the reform and improvement of Kentucky higher education, a program to increase its quality. The program disavows "business as usual," but it does not call for dra-

[13]Carnegie Council on Policy Studies in Higher Education, *Three Thousand Futures* (San Francisco: Jossey-Bass, 1980) p. 97.

matic structural shifts, such as closing or merging institutions. It calls instead for a defined system of education that focuses on encouraging and monitoring positive results for the students and the people the system serves.

We believe that there are three elements central to reform and improvement, none unique: an increased emphasis on quality in higher education, on creative leadership, and on increased and more effective use of financial resources.

We know that Kentucky's universities have made substantial contributions to American higher education and to their students, but we also believe that the level of excellence that Kentuckians want has not been achieved. The improvement of higher education is Kentucky's central challenge. "Quality in higher education" means a system of colleges and universities that enhances the lives of all students, that challenges the brightest and helps the poorly prepared to enter the mainstream of American society. "Quality in higher education" means basic and applied campus research that is judged excellent by other researchers and those who use research.

This Committee does not imply that Kentucky's system of higher education is of low quality. Rather, we aspire that Kentucky's system become as strong as that of any state in the nation. California, Wisconsin, Minnesota, North Carolina, Illinois, and other states are often described as having high quality educational systems. Generally those systems include one or more universities that have gained national reputations for the work of their faculty; they are prestigious and competitive research universities. There is no research university in Kentucky that is in the top ranks of national research institutions. Colleges and universities in the high quality systems are noted for excellence in particular fields: an innovative or outstanding academic program, research in a particular area, or excellence in a specialized field. Students, faculty, employers, and governments seek them out. Kentucky has no public institution that has achieved national recognition or national competitiveness in attracting talented undergraduates.

In the program presented here, we ask our fellow Kentuckians to put aside complacency and adherence to the status quo and to aspire with us. Kentucky is now in a good position to move toward the attainment of high quality in its educational system. For three decades access to higher education through the expansion of the system of higher education has been a top priority in Kentucky. We are con-

vinced that the state has enough universities and colleges, community colleges, and specialized programs to make access to advanced education adequate. With the exception of older learners and financially deprived students, Kentucky has, by and large, achieved its objective of access to higher education for all who want it.

The quest for accessibility has meant a primary emphasis on growth in public higher education: new and bigger buildings, programs, laboratories, stadiums, and libraries. The challenge now is to use that growth effectively and to channel new growth where it is most needed. The buildings and degree programs are in place. Now Kentucky must improve the quality of what is happening inside those buildings and programs.

Prerequisites to Quality

The recommendations in this report, when implemented, ensure that certain prerequisites to the achievement of quality will be met:

- Kentucky and its higher education institutions must concentrate resources in such a way that performance in improving the lives of students and the public, rather than institutional growth, is the measure of excellence. Methods for evaluating performance must be devised and performance must be monitored.

- Kentucky's universities and colleges must use resources to capitalize upon their strengths and must specialize in providing the services that are most needed in a system made diverse through clearly differentiated missions.

- A real system needs agreement between the state and the universities and colleges upon what the nature of the system and the different responsibilities of each institution should be. The Council on Higher Education, in defining Kentucky's system of higher education in 1977, assigned differentiated roles to the institutions. The thrust established by the Council in 1977 should be continued as the system and the universities and colleges within it mature or change. If this means that university mission statements must be rewritten to conform with recommendations in this document and the demands of the future, the Council and the universities should do so.

- The universities and colleges must develop academic programs that balance the immediate needs of the economy and the broader need to educate persons to live in and deal with a complex and changing society.

- Kentucky's universities and colleges must be encouraged to remain creative and dynamic within flexible standards established by the state so that they may respond to unforeseen needs within the system. Universities and colleges need incentives to be dynamic and flexible.

- Kentucky must invest in excellence by providing scholarships and programs for highly gifted students; by attracting and retaining outstanding faculty and senior scholars and teachers; and by encouraging innovative instructional approaches and high quality research.

- Diversity among institutions must be encouraged, not only through specialization by public universities but through continued financial aid support for students who attend private and independent colleges and universities in Kentucky.

- Universities and colleges must use flexible teaching methods to meet the needs of all student populations aspiring to higher education.

- Kentucky must expect its research universities to help it prosper in an age of competitive economic development and of technological, social, and economic change by focusing financial resources on research and by demanding increased performance of research and increased cooperative research among its universities.

- Financial resources must be used more effectively through good management, hard decisions, cooperative efforts, planning, the elimination of activities that are not central to institutional missions, and the reduction and elimination of external or internal bureaucratic conditions that unnecessarily increase costs.

- Increased cooperation among universities and colleges will improve the performance of the system. Cooperation should take the form of such activities as joint academic programs, cooperative research or public service activities, and shared research equipment and facilities. The Council on Higher Education should provide guidance and positive incentives to encourage cooperation and should monitor and evaluate the effects of cooperative efforts.

- Leadership at the state and institutional levels will face difficult demands in the future. This challenge must be met without damaging and burdensome controls being exercised. The Council on Higher Education must ensure that the need for a system of higher education is understood, that the uniqueness of each institution is protected, and that performance is monitored closely.

- Additional financial resources will not guarantee increased quality, but the absence of resources is certain to diminish quality. Additional resources from reallocation, from increased appropriations and from increased revenues are imperative. However, higher education institutions must understand that improved performance will be expected as a result of their being provided increased financial resources.

If these prerequisites are met through the implementation of the recommendations on the following pages, we believe that Kentucky can provide high-quality higher education for its citizens.

II
The Issues And Recommendations

FOCUS ON QUALITY

ON THE FOLLOWING PAGES the Prichard Committee on Higher Education in Kentucky's Future examines what it means to be an educated person. These thoughts are the basis for much of what follows throughout this report.

This Committee then turns to several issues that are singled out for special attention: balance between "general" and "occupational" education and the needs of highly talented, educationally ill prepared, and older or nontraditional students.

Next, we consider the complex relationship of improving quality in higher education to other social institutions and we make specific recommendations for university admission standards, for the education of teachers, for changes in the schools, and for working relationships between higher education and the schools.

Finally, we outline activities that will inspire excellence throughout Kentucky's system of higher education.

The Educated Person

Although in this report this Committee looks to the future, many of our conclusions grow out of an educational philosophy which is rooted deeply in the past. Learning does not end with formal "schooling," nor does education produce a "finished product." Education should make one "able," in the broadest sense, so that learning can go on throughout one's lifetime. The erroneous belief that education ends with the awarding of a degree has placed too much responsibility for "learning" on schools and too little on the individual and on other institutions.

This Committee believes that learning ought to continue throughout one's lifetime. So that learning might continue, an educated person should master a broad range of competencies:

The educated person must be proficient at advanced levels in certain basic skills: the ability to read and assimilate information, the ability to analyze and formulate concepts and ideas, the ability to use mathematical and fundamental statistical knowledge, and the ability to communicate information and ideas to others in writing and by other means. An increasingly complex and technical society, with tools such as calculators and computers that superficially make basic skills unnecessary, makes these skills all the more necessary. High levels of proficiency in basic intellectual skills will help eliminate in people the sense of helplessness they sometimes experience in the face of often confusing, complex, and highly technical information.

The educated person must be able to build reasoned generalizations from knowledge and to apply knowledge of specifics and general principles about one area to others. The abilities to reason from specific information to general principles and to transfer knowledge among areas are at the heart of an individual's ability to understand society and himself and to function effectively within society.

The educated person must be able to analyze and resolve problems. A person's application of intellectual power to meet social and personal needs and to solve technological, social, environmental, and economic issues of the future is achievement at the highest level. However, such achievement requires that one have understanding of social institutions, fundamentals of science and the scientific method, the nature of economic systems and processes, and characteristics of our natural and manmade environment, as well as the sensitivity toward the human condition that is transmitted through humanistic reflection and the study of the arts and literature.

The educated person must have the capacity for introspection and for developing personal values. Familiarity with and the understanding of ethical and religious concepts and principles, basic philosophical propositions, one's cultural heritage and place in the stream of history, and tolerance for the ideas of others are at the

heart of this capacity. Educated persons should be responsible family members, citizens, and workers.

The educated person must be able to communicate effectively. The ability to communicate will be challenged by change in our society. Effective communication not only requires traditional verbal and listening skills, but also the ability to communicate complex information both to peers and to those who are less knowledgeable. Failures in communication between the governors and the governed or between the well educated and the less well educated lead to divisions in society.

The educated person must understand his intellectual, cultural and social heritage and the implications of that heritage. Without such understanding, individuals are unable to fully understand themselves, their personal heritage, or the society around them. This understanding is fundamental to the development of personal values.

Educated persons should have the skills necessary to support themselves and those dependent upon them and to contribute to the economic well being of the society. All of the preceding characteristics provide the foundations for contemporary "economic man," but specific skills directly related to occupations are also essential. However, education in specific occupational skills does not end with the completion of formal education; it must continue throughout a working lifetime. Also necessary is the ability to make informed judgments about the nature of the work that best suits the individual and the ability to understand the relationship of work to other aspects of one's life.

The educated person should have the desire, curiosity, and ability to continue to learn independently and to stay informed. The seeds of curiosity, sensitivity to the importance of knowledge, and tolerance for new or unusual ideas must be planted early in life and nurtured throughout. The capacity for independent thought in the face of conventional wisdom requires personal courage, the ability to form and establish personal values, and a personal philosophy.

Educated persons must have the knowledge to effectively manage and improve their personal well being. Such knowledge requires basic familiarity with human nature, with emotional and psychological growth, and with the fundamentals of personal health and the human body.

The preceding competencies do not fit neatly into categories but are dependent upon one another. The educated person should, of course, possess other characteristics, many of which may or may not directly result from formal education. These include the desire for self-sufficiency; a spirit of cooperation, contribution and sharing; and aesthetic awareness and appreciation.

These views affirm traditional purposes of higher education without spelling out the form such education should take. There is no single mold for education, no necessary uniformity of program or instructional approach. There is, however, an underlying unity of purpose inherent in the description of the "educated person" given above. **Colleges and universities must not allow their concern with accommodation of student and societal preferences and with varying levels of student ability to divert them from their central purpose, that of helping students become educated persons able to continue to learn and grow.** Such a purpose becomes even more imperative in a complex and changing society. Kentucky's colleges and universities must attend to this purpose and must devise ways to assure themselves and their students that these purposes are being achieved.

Special Concerns

This Committee's primary concern is the quality of the education that all students receive from Kentucky's colleges and universities. However, we wish to focus particular attention on the following:

- The appropriate balance between "general" and "occupational" education;
- The needs of highly talented students;
- The needs of students who are poorly prepared for college level work; and

- The needs of adult learners, or so-called "nontraditional students."

The relationship between historic and central purposes of higher education, education designed to enhance the total person and education designed for occupational competence, must be kept in balance. The provision of occupational competence alone does not suffice as a higher education, but higher education is not complete without the provision of a basis for attaining occupational competence. These two central purposes are in harmony when higher education of high quality is provided. However, such harmony may be threatened when short-range economic conditions encourage higher education to emphasize narrow occupational training. This tendency should be avoided. The future will demand that workers and citizens have breadth of knowledge and be adaptable, rather than have narrow skills. On the other hand, universities cannot ignore the occupational training needs of their students and Kentucky. The need for specific and marketable training is apparent, but it must be kept in the correct balance with other needs.

Students of the highest ability and talent are resources vital to the future of Kentucky. These students require that educational opportunities be as challenging and productive as the state can offer. The demands on higher education over the past two decades to serve an expanded student population have resulted in a concentration on the provision of basic academic courses and services. Programs and services for academically talented students have not received adequate attention or financial support because public universities with open admission policies often must spread services and resources thinly over the diverse student populations they serve. Special programs for the gifted can be too easily ignored in efforts to serve the majority of students.

Continued inadequate support for special programs for gifted students is shortsighted and a dangerous trend that must be reversed. These students deserve special attention and special inducements to attend Kentucky colleges and universities. Results from the Council on Higher Education's Kentucky Longitudinal Study show that 59 percent of the "high ability" graduates, or those students with ACT scores in the top 5 percent, enrolled in the eight public universities in the state. An additional 11 percent enrolled in private four-year institu-

tions in Kentucky. More than 25 percent of the "high ability" graduates enrolled in out-of-state institutions.

Universities are now, and increasingly will be, caught in a difficult dilemma as dwindling financial resources require the elimination of programs and services, especially those that are considered to be "frills." **This Committee cannot emphasize too strongly that programs for talented students are not "frills," but are the very heart of a quality system of education.** If highly talented students are not attracted and developed, they will not be available to fill creative positions in Kentucky universities, government, and business and industry, and the state will have lost a valuable resource to help solve its problems.

Services that are called "remedial" or "developmental" education should be provided when necessary to ensure equity and fairness in educational opportunity and to enhance some students' chances of academic success. Remedial or developmental programs should not be viewed as permanent functions of higher education. Instead, they should be viewed as temporary actions to correct educational deficiencies in a portion of the population. To suggest that such deficiencies are a temporary condition runs counter to demographic trends for the future. Therefore, this Committee believes that society must launch a broader attack on the basic problem of youth poorly prepared for higher education, not merely provide palliative measures such as remedial programs. Care must also be taken to ensure that the causes and nature of learning problems are diagnosed accurately and early and where deficiencies are identified, the necessary corrective services supported.

We feel that the system of higher education must recognize and accommodate the educational needs of a growing population of older, or "nontraditional," students. The national trend of increasing numbers of mature students, frequently enrolled part time, is evident in Kentucky and can be expected to continue for at least the next ten years. Adult learners, especially those returning to higher education after many years of work, raising a family, or community service, have needs that may be very different from those of students just out of high school. Colleges and universities must continue to find new ways to help nontraditional students obtain the benefits of higher education. (We consider the needs of nontraditional students in more depth in the subsection, "Academic Programs—Challenge and Opportunity.")

Seeking Excellence in a Complex Society

Current discussions of the quality of education in the schools frequently cast blame at teachers, parents, school administrators, or young people. **Casting blame is not a constructive exercise, and we hope to avoid it. This report holds that responsibility for problems in the schools belongs to our entire society.**

Over the last few decades society has come to expect educational institutions to take responsibility for tasks previously lodged with families, churches, governments, employers, and other social institutions. These tasks include the teaching of self-discipline and personal responsibility; training related to sex, drugs, and religion; the provision of health care and entertainment; and the promotion of various social policies. In its extreme, this condition diverts education from its central purposes. Either the expectations of education should be changed or society must provide to the educational system financial resources adequate to do what is expected. This Committee prefers that society take back responsibility for many of the noneducational tasks the schools and universities have assumed.

The quality of the educational preparation provided to students before they enter higher education requires careful examination. Evidence supports the public perception that today, large numbers of high school graduates are not well educated. There is evidence of "functional" illiteracy among high school graduates: The National Assessment of Educational Progress shows decreasing levels of educational achievement; a recent study by the College Board revealed appalling deficiencies in awareness of global conditions among college students; academic aptitude test scores are declining; and there is a documented increase in the need for remedial education programs at the college level. (See Figures 1 and 2.)

Increasing proportions of students are either less ready or not ready at all to take appropriate advantage of higher education opportunities. Many of these students require services that traditionally have not been offered on a large scale in higher education and, consequently, require instructional methods foreign to many university faculty members.

All students in higher education have attended elementary and secondary schools and have received educational preparation that either enhances or reduces the effectiveness of higher education for individuals and for the larger society. Quality in elementary and secondary

Figure 1

Average National and Kentucky ACT
Composite Scores for 12 years
(1968-69 through 1979-80)

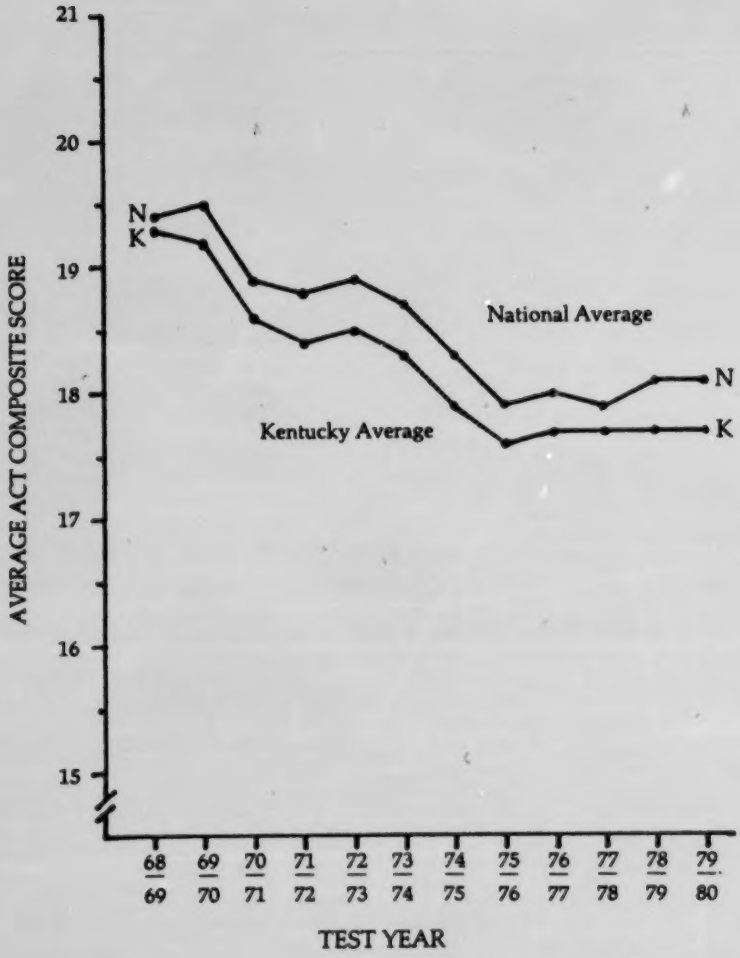
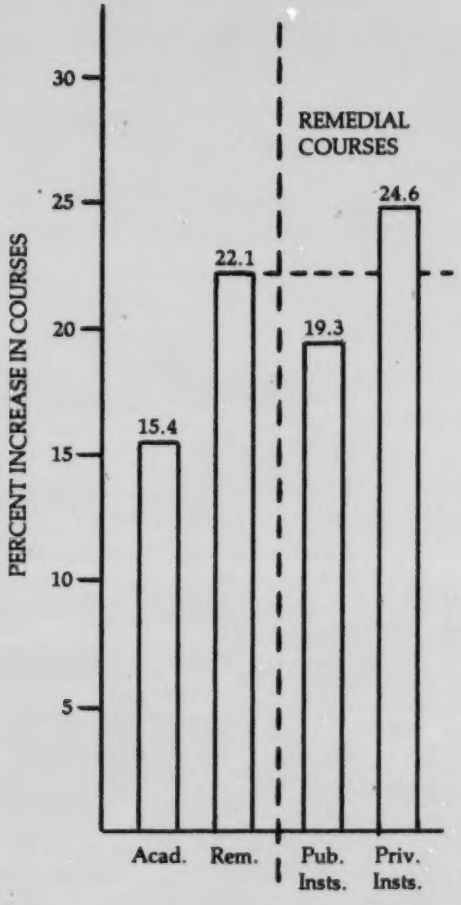


Figure 2

Percentage Increase in Academic and Remedial Courses at Colleges and Universities, and Percentage Increase in Remedial Courses by Type of Institution (1979-80 to 1980-81)



education is a fundamental prerequisite of quality in higher education. In fact, excellence in higher education is directly tied to the quality of the larger school system, and, in turn, quality in the school system is tied to a host of factors in a larger society. The situation resembles a jigsaw puzzle in that moving one piece changes the arrangement of all the others: Improved elementary and secondary education affects college admission requirements and enrollments; different admission standards affect the schools; the training of more capable teachers improves future generations of new teachers; and so on.

Several general observations can be made regarding quality in the schools:

- The adequacy of education provided by elementary and secondary schools is a massive public policy and financial issue.
- The issue should not be identified only as a "school" problem, for it is a problem of our entire society.
- Higher education cannot ignore some basic responsibilities for solving the problem.
- There is every likelihood that substantial national and state attention will be devoted to education, especially secondary education, over the next decade.

Higher education intentionally (and sometimes unintentionally) influences elementary and secondary education in many ways through its admission policies, services provided to students, preparation of teachers, direct social and political influence, and even neglect of those educational levels. **Higher education must consciously use its influence to improve education at all levels.**

Higher education must make its expectations clear to educational institutions that prepare students for higher education. Communication and coordination between and among higher education and all other levels of the educational system in Kentucky are essential for educational quality and improvement. The responsibility for maintaining effective communication and coordination is a joint responsibility of all parts of the educational structure, but higher education should take the initiative and provide thoughtful and determined leadership.

In Kentucky the high school diploma traditionally has been seen as adequate evidence of readiness for higher education. However, due to an expanded high school population and expanded and more diverse high school curricula, the meaning of the high school diploma has changed. There are serious doubts about the adequacy of the diploma alone as evidence of readiness for higher education. According to the Council on Higher Education's Kentucky Longitudinal Study, recent graduates of Kentucky high schools share these widespread doubts. Two of every three 1980 high school graduates surveyed in the study favored requiring students to pass a competency examination as a condition for receiving a high school diploma.

It is essential that efforts be made to identify the special needs of entering college freshmen and to assess the strengths and weaknesses of their college preparatory work. Such efforts will enable institutions to measure how much the students gain from their college experience and how much they are helped by it, thereby providing additional information for the evaluation of institutions and their programs.

In this regard this Committee notes with concern that funding for the critical remedial services element of the Educational Improvement Act has not been provided. It is imperative that the legislature provide such funding so that the intent of the Act, which it passed, can be carried out. The Committee strongly urges the Department of Education to call for funding necessary for full implementation of the Educational Improvement Act in its 1982-84 biennial budget request.

The adequacy of preparation of students for higher education in the schools is intertwined with the complex social issue of "'equal access" to higher education. The Commonwealth of Kentucky has a well established commitment to making higher education available to all citizens who qualify for and aspire to it. "Open admission" policies embody this commitment. However, "equality of access" to higher education is not necessarily the same as "equality of opportunity to benefit from higher education." Genuine educational opportunity depends on matching each student's needs and abilities with programs from which he or she can benefit.

If all students who have received a high school diploma are to be given unrestricted access to higher education and if the high school diploma is in reality no longer an adequate gauge of readiness for college work, then the system of higher education very likely is not providing genuine equality of opportunity. **In other words, this Committee believes that if students are led to believe that they are prepared for**

higher education when indeed they are not, and thus find themselves unable to succeed in college level work, they have not been well served. If universities are open to all comers with the expected result of success, who must accept the obligation to retain those students with inadequate skills and help them learn? A system that results in such a problem is not rational, fair, or effective.

In the last two decades, there has been a striking increase in the number of students who enter college with deficiencies in particular skills or who are grossly ill prepared for college level work. Declining standardized test scores, national research, and additional evidence substantiate this condition. At the same time, the comparatively low college attendance rate of Kentucky high school graduates leads us to speculate that if the attendance rate increases, the increased college population may be composed of even larger proportions of students who are ill prepared.

National and state demographic projections also suggest that birth rates are leading toward a situation in which young people from families in the lowest socioeconomic categories constitute a larger and larger share of the youth population. Such youth now represent about 14 percent of the population between thirteen and eighteen years of age; by the year 2000 this group will double, comprising approximately 30 percent of the youth population. As these young people and their families seek higher education, the demands on the educational system for programs to help them take advantage of college level learning will increase. **The gap between the "well prepared" student and the "ill prepared" student may widen and create vast new challenges for institutions of higher education.**

The need for special programs for poorly prepared students will not go away. Therefore, this Committee is concerned about the possibility that such programs may become a driving force or a principal function in institutions of higher learning. We take the view that, over time, the number of young people in this ill prepared category must be reduced by action on several fronts and not just in higher education. Fundamental reform at the elementary and secondary level is clearly required. Also, as suggested in our recommendations on admission policies, more of these students should begin their higher education in institutions such as the community colleges, which have or should develop special expertise to meet their needs.

Our concern for equality of educational opportunity and for increased quality leads us to question whether or not the current admis-

sion policies of Kentucky's public universities are appropriate. (This discussion excludes graduate and first-professional degree programs, which do use selective admissions.) With the exception of specific academic programs within some universities, no admission restrictions are used, although some students may thrive in one educational environment, and other students may succeed in very different educational environments. To effectively teach their students, and thus to be truly effective institutions, universities will find that increased academic specialization is desirable. A university trying to serve a student body with extreme diversity of talents may spread its resources so thinly that excellence will be difficult to achieve. **If true equality of opportunity is Kentucky's aim, then students' interests and abilities should be matched more carefully with institutions that can help them the most. Failure because of an inability to do college level work can be a severe and needless trauma for a young person.**

It is important to note that differing admission requirements among universities are not indicative of differing levels of quality, but indicate instead differing missions and goals. An institution, therefore, may perform effectively when it helps poorly prepared students gain confidence and enhance their abilities. How well students improve their talents through education is one measure of a successful educational institution. Educational policy makers and planners must devise ways to measure and evaluate what students gain from their educations.

In considering the general question of admission policies, we acknowledge the contemporary concern about projections of declining college and university enrollments. Will changed admission standards further reduce future college enrollments and harm Kentucky's universities? We do not believe that enrollment projections are accurate enough to delay necessary action or that level of enrollment should be a priority consideration, although any changes in admission policies should be carefully monitored for unintended consequences. **The retention of students until they complete their educational programs or achieve their objectives is a more critical goal.**

College and university enrollment projections at national, state, and institutional levels are abundant. A majority of these project decreases ranging from modest to severe, but optimistic projections are by no means rare. Projections made by the Carnegie Council on Policy Studies in Higher Education and by the Ford Foundation represent the majority view that college enrollments will decline steadily until

the mid to late 1990's. Both studies rely heavily upon a decline of 23 to 26 percent in the eighteen to twenty-four-year-old population between 1979 and 1997. Each projects an average national enrollment decline of approximately 15 percent, although the projected decline is expected to vary considerably across geographical regions and among types of institutions. Both the Carnegie and Ford studies project "average" (10 to 15 percent) enrollment declines for Kentucky. Other studies have projected enrollment declines approaching 40 percent for higher education as a whole.

The most notable optimistic study is a recent analysis by the Association Council for Policy Analysis and Research, which projects *possible* enrollment *increases* of 30 percent. Such increases, which would be expected to vary widely across regions and among institutions, would reflect the aggregate effect of numerous enrollment development strategies by colleges and universities. Using this approach, Kentucky would be expected to have the potential for moderate to substantial enrollment growth.

The diametric opposition of reputable projections reflects the imprecision of forecasting enrollments. Unlike the schools, where attendance is mandatory and enrollments can be projected on the basis of population data alone, college and university enrollments depend on the prospective student's free choice to attend. In a state like Kentucky, the principal factors affecting college and university enrollments beyond population projections include in-migration and out-migration; the state of the economy at national, state, and local levels; high school graduation rates; the "college-going" rate of high school graduates; social policies (including veterans' benefits and military manpower policies); tuition and financial aid policies; retention rates in institutions of higher education; attendance patterns of students (including shifts in part time/full time proportions, "stop-outs," and other forms of intermittent attendance); youth independence from parental support and preferences; increased numbers of adult learners; changes in the composition of the population and relevant subgroups; employment related graduate education; and alternative postsecondary education opportunities. Most differences in enrollment projections can be accounted for by differences in assumptions about the effects of these factors (how many adults will enroll, for example). In some instances realistic assumptions about the future nature and effect of these factors can be made; in other instances, only "educated guesses" can be made.

While the size of future college and university enrollments in Kentucky is important, educational quality is paramount. Quality should not be compromised on account of quantitative considerations; quality must be developed and provided, regardless of quantity. In essence, the quantity of future enrollments is primarily a logistical consideration relevant to the delivery, rather than the quality, of educational programs.

Higher education has a direct responsibility to elementary and secondary education through its training and preparation of teachers. Several aspects of the effectiveness with which this responsibility is carried out must be examined. As universities prepare elementary and secondary school teachers today, they indirectly shape the university students of the future. Their "product" comes back in the next generation. Historically, the task of educating teachers has been embraced by public higher education; many institutions were specifically established to serve that purpose. **Although institutions of higher education cannot guarantee the ability of teachers over a lengthy period of time, they must assume primary responsibility for the quality of the initial preparation teachers receive. The exact nature of this responsibility must be defined.** We believe that informed citizens have ample reason to doubt that fulfillment of teacher training program requirements alone ensures a person's competence to teach. We also believe that teachers should be well grounded in basic skills and in knowledge of the subject areas they teach and that the Kentucky Council on Teacher Education and Certification should give greater emphasis to this.

Further, we believe that continued teaching competence cannot be assumed, but must be subject to continuing professional education and development and to periodic reassessment. Higher education, through the provision of continuing education for teachers, through consultation regarding curricular innovations, and through thoughtful attention to teacher growth and development, has a role and natural interest in the concept of continuing competence.

While traditional teacher education is the primary function of schools and colleges of education, their exclusive focus on preparation of teachers for traditional roles in elementary and secondary schools will not meet the future needs for education in our society. Able and qualified individuals will be needed in such nontraditional settings as the educational functions of business and industry. Intensive technological and scientific change will dramatically expand the need for recurrent, continuing, and adult education in the future. This Commit-

tee looks to Kentucky's schools and colleges of education as sources of leadership in meeting this emerging need.

Avenues To Quality

Improving higher education in Kentucky will be a complex task to be shared by schools, higher education, and society as a whole. Actions on one front should, over time, raise quality on other fronts. If, for example, the quality of education provided by the schools were to increase markedly, then ultimately even the most selective admissions policies would allow most students to attend any institution, and the need for remedial education programs would eventually wither away. Time will show the effects of the changes we recommend.

We turn now to approaches that can have immediate benefits for Kentucky. For immediate action, we recommend that the Commonwealth create a "fund for academic excellence."

One purpose of this fund would be to provide scholarships that would be awarded to students on the basis of talent, rather than upon financial need, in an effort to attract the most talented and gifted of Kentucky's high school graduates to public or private institutions of higher learning within the Commonwealth. Such a program should increase the chances that these talented Kentuckians would stay within Kentucky and contribute their talents to our state.

The fund would also be used to create "endowed" chairs to attract and retain outstanding scholars, teachers, and researchers of a national reputation. Such enhancement should stimulate the productivity of all faculty as well as make Kentucky universities more attractive to graduate students of high ability.

Third, such a fund would be used to promote faculty development. This Committee believes that faculty creativity will be continually inhibited by the absence of the most rudimentary kinds of support for research, public service, and the improvement of teaching skills. Even modest financial grants from the fund to stimulate special efforts and to fill the gaps in institutional budgets can be instrumental in preserving faculty creativity and vitality. A comparatively small investment could yield a large return.

Finally, the fund would be used to encourage educational innovation. Universities and colleges are creative and dynamic institutions, willing to undertake and develop new approaches to providing high

quality educational services to students. Often, however, new programs or educational approaches are not developed because financial resources must first be allocated to the more basic and routine activities. Therefore, a portion of a "fund for academic excellence" should be awarded on a competitive basis to institutions so they may experiment with new programs and approaches. A competitive process using evaluators from outside Kentucky and restrictions on grants so they provide only temporary support should be implemented.

Taken together, the activities of a "fund for academic excellence" would be designed to encourage Kentucky's talented young people to stay within the state, attract faculty of the highest quality to Kentucky from outside the state, and inspire individual faculty members and educational institutions to higher levels of performance. We believe that such a plan forms the essential first step toward our goal of elevating the quality of higher education in Kentucky.

Recommendations Regarding Higher Education and the Schools

Higher education intentionally (and sometimes unintentionally) influences elementary and secondary education in many ways, through its admission policies, services provided to students, preparation of teachers, direct social and political influence, and neglect of those educational levels. Therefore, higher education must make its expectations clear to educational institutions that prepare students for higher education and must also take the initiative for improving communication and coordination between and among all levels of the educational system and for providing leadership in the continuing pursuit of high quality education in Kentucky.

Recommendations

The institutions of higher learning and the Council on Higher Education should adopt the basic philosophy that it is their right and obligation to be concerned about the quality of elementary and secondary education, even without spe-

cific statutory responsibility for elementary and secondary education.

Kentucky's public universities should identify and agree upon basic or minimally acceptable college preparatory curricula to be required of all entering students. To implement this recommendation, an interinstitutional committee representing public universities, community colleges, private colleges and universities, and the high school community should be established by the Council on Higher Education and charged with developing appropriate curricular requirements for presentation to the Council by June, 1982. These curricular requirements should be disseminated to the secondary schools.

A procedure for the "conditional admission" of students who have not completed the basic college preparatory curricula should be established by the universities and colleges. Students who are admitted conditionally should be required to overcome any deficiencies in preparation through appropriate means after they have enrolled (e.g., challenge exams, successful completion of suitable substitute courses, noncredit "catch-up" courses, and other means). In the development of these requirements and procedures, special consideration must be given to the admission of nontraditional students.

The Council on Higher Education, in cooperation with the public and private colleges and universities, should develop and require a program of basic skills testing upon entry into higher education. This testing program should be coordinated with the provisions of the Kentucky Educational Improvement Act. It is critical that the entire educational system—elementary and secondary education, as well as higher education—develop means by which the educational progress and the attainments of students can be evaluated. It is equally critical that this evaluation be used to improve academic programs and to assess the success of academic programs within higher education. This testing should be aimed specifically at diagnosing student strengths and weaknesses. Test results should be given to the secondary schools and to

the general public. University academic units, on an experimental basis, should be evaluated on the basis of the progress of their students.

To assist in the improvement of elementary and secondary schools, the academic personnel of Kentucky's universities should be encouraged to provide research and service directly to local schools. The value of such service should be recognized in universities' evaluation of faculty performance, and support for such service should be established within the universities.

This Committee expects the Council on Higher Education to provide the leadership and direction necessary to implement the recommendations regarding higher education and the schools. To facilitate this charge, the Council should incorporate within the context of its statewide coordinating and planning responsibilities an active and continuing role in fostering communication and cooperation between the schools and the institutions of higher education.

Recommendations Regarding Admission Policies

Kentucky's system of higher education should be open to any Kentuckian with a high school diploma, but the high school diploma alone is not adequate evidence that a student is prepared to enter any institution within the system. Students are served best when their talents and interests are matched with the programs or institutions that are best suited for them. Similarly, institutions may be less effective if they must serve a student body whose backgrounds, interests, expectations, and aspirations significantly diverge from the mission, resources, and programmatic strengths of the institution. If Kentucky is to have a successful system of higher education with different functions assigned to institutions in the system, admission standards must reflect and reinforce those differentiated functions.

Admission policies, enrollments, and budgetary support are closely linked, and changes in one may have unintended consequences on another. Further, it is difficult to project enrollment and related demographic trends accurately over the next twenty years. The following recommendations are not intended to inhibit future flexibility. In that the policies recommended can have unintended consequences, they should be monitored carefully and changed as circumstances change. Constant review and analysis are necessary.

Recommendations

The community colleges, both within the University of Kentucky Community College System and those under the administration of the public universities, should continue their current "open admission" policies to provide access to all Kentuckians.

Kentucky's universities should move toward establishing admission criteria in addition to the high school diploma that are relevant to their individual missions and that reflect their different functions.

In recognition and effectuation of its existing mission as the principal institution for comprehensive research and service programs, the University of Kentucky shall place special emphasis upon its upper division undergraduate, graduate, and professional levels. In cooperation with the Council on Higher Education, the University of Kentucky shall adopt policies of admission, including limitations upon enrollment, that contribute to that emphasis. The other universities should also adopt standards of admission, in cooperation with the Council on Higher Education, that reflect their missions and different functions.

All universities must develop policies that enable students to transfer among institutions with reasonable recognition of credits earned. The University of Kentucky must make special provisions to provide access to its upper division level for those students who have demonstrated their ability to do

such academic work and have completed lower division requirements.

The University of Kentucky serves one of the largest metropolitan regions in Kentucky, and the population within the immediate proximity must have access to postsecondary education. To provide this access when the University of Kentucky reduces its lower division enrollment, the Lexington Technical Institute must offer an appropriate array of traditional lower division courses that will permit student transfer to the upper division level.

The Council on Higher Education should monitor the effects of the above actions. Based on its findings, the Council might determine a need to recommend further modifications.

The public financial support provided to universities should be protected through the formula funding process if, as experimentation with or changes in admission policies are implemented, undergraduate enrollments decline or remain stable.

Criteria for admission established by the universities and the Council on Higher Education shall be in full accord with state and federal statutes and regulations that bar discrimination on the basis of race, sex, religion, national origin, handicap, or age.

Recommendations Regarding Teacher Education

As universities prepare elementary and secondary school teachers today, they indirectly shape the university students of the future. Their "product" comes back in the next generation.

As the providers of initial training for Kentucky's elementary and secondary teachers, Kentucky's colleges and universities have a direct

responsibility for the quality of teachers they prepare and graduate. The institutions' ability to carry out this responsibility effectively is influenced by factors over which they have no control, such as the attractiveness of teaching as a profession, the varying abilities of the students who enroll in teacher education programs, teacher salaries and working conditions, and the status and reputation of the teaching profession. Still, many critically important factors are subject to university control and influence, and they warrant action.

Beyond the teacher education programs themselves, the primary means of assuring the competence of elementary and secondary personnel is through the process of certifying teachers. It is this Committee's view, supported by national research and actions in other states, that fulfilling teacher training program requirements alone may not ensure an individual's competence to teach. Because teachers should be well grounded in basic skills and in knowledge of the subject areas they teach, the state Council on Teacher Education and Certification should give greater emphasis to these areas. Further, continued teaching competence cannot be assumed but must be subject to continuing professional education and development and to periodic reassessment.

While teacher education is the primary function of schools and colleges of education, the Committee believes that an exclusive focus on the preparation of individuals for traditional roles in schools will not meet the future needs for education in our society. Intensive technological and scientific change will dramatically expand the need for recurrent, continuing, and adult education in the future. Kentucky's schools and colleges of education should provide significant leadership in this area.

Recommendations

Before they are admitted to teacher education programs, students should demonstrate a substantial level of competence in basic skills; before graduation from teacher education programs, students should be tested in subject matter knowledge and should demonstrate satisfactory teaching skills.

Schools and colleges of education should engage in ongoing program evaluation to assure the appropriateness, effective-

ness, and substantive quality of their teacher education programs. Initially, this activity should specifically provide for a thorough examination of the appropriateness of the current teacher preparation curriculum with the objective of placing more emphasis on subject matter content and rigorous field work (practice teaching). This examination should lead to the elimination of any course requirements that make completing the program unnecessarily cumbersome and that discourage talented students from entering the profession.

Colleges and universities share with the larger society a responsibility for assuring continuing competence of teachers, but they are not and cannot be solely responsible. To help teachers maintain their effectiveness, the individuals and organizations independently and jointly responsible for it should give serious consideration to the following recommendations in developing strategies for maintaining the quality of teaching:

- Continued professional education does not always have to be offered in formal education institutions. The systematic use of "master teachers" as mentors should be seriously explored. Experienced teachers from the schools can and should be valuable resources in helping other teachers improve.
- Giving teachers a choice in the selection of educational offerings could encourage more active interest in any required form of continuing education. The substance of in-service and continuing education for teachers should define and drive the delivery system. The educational system or available training *should not* define the substance.
- There is no magic in a formal degree program; mandated degree programs may serve colleges rather than teachers. Graduate degree programs should be recognized as a means to an end. Seeking and obtaining a graduate degree for its own sake should not displace the original goal, that of ensuring continuing competence.

- Teacher salaries should be tied to performance as well as to educational achievement. Teacher salaries and salary increases that do not recognize outstanding performance and that tolerate or reward inadequate performance encourage mediocrity, not excellence.

Kentucky's colleges and universities should provide renewed and forward looking leadership in all aspects of education in the years ahead. Specifically, institutions of higher education in general and schools and colleges of education in particular should adopt a significantly broader view of "teacher education" that emphasizes the education of professional educators for teaching and related roles beyond the traditional schools. Further, schools and colleges of education should be encouraged to actively seek the involvement and cooperation of faculty in other academic areas as a means of strengthening current programs.

The Kentucky Department of Education should thoroughly review and strengthen existing standards for all levels of teacher certification in Kentucky. This Committee's call for a review is predicated on our view that the demonstrable competence to teach, rather than the fulfillment of educational course requirements, should guide teacher certification standards. This review of teacher certification standards should involve a broad cross section of the general public and the educational community. This review of standards for both initial or provisional and "permanent" certification should focus on the following concerns:

- The need for more study in *subject* areas as opposed to professional education. We express particular concern for the teaching of English, mathematics, history, and the sciences.
- The need for testing to assure competency for initial certification.
- The need for students to achieve a necessary grounding in the liberal arts or general education prior to their admission to teacher education programs.

- The need for alternative routes to certification, such as expanded in-service training or the substitution of certain demonstrable skills for required coursework.
- The need to recognize explicitly the value of supervised professional experience in professional development and the need to incorporate such experience as a necessary element in the standards for "permanent" certification.
- The need for alternative models for certification. In recognition of the element of effective teaching that is more accurately described as "art" than as "science," the certification model used for public accountants, which includes a full time professional practice component in addition to competency tests, is worthy of careful examination.

The Council on Teacher Education and Certification should be restructured to be more broadly representative of educators (in traditional academic disciplines), citizens, parents and consumers. It should operate with appropriate advice from professionals in the field of education.

Recommendations Regarding Remedial Education

The Commonwealth has an obligation to assist students who have learning deficiencies or who are inadequately prepared for college work, and its universities and colleges have begun to meet this challenge. This Committee takes the view that over time the number of young people who are ill prepared must be reduced by actions on many fronts. First, reform at the elementary and secondary level is clearly required (an issue spoken to elsewhere in this report). Second, recommendations regarding admission policies suggest that more and more ill prepared students should enroll in institutions such as the community colleges, which now have or should develop the special expertise to meet those students' needs.

Recommendations

The provision of equal higher education opportunity requires that services to assist young people in reaching their learning potential must be provided by Kentucky's universities and colleges.

The state's universities and colleges should encourage and support remedial programs; however, these programs should not become a permanent part of the university structure that serves a majority of the students' needs.

Recommendations Regarding Highly Talented Students

This Committee believes that the future will demand highly talented and educated citizens and workers to deal with massive technical, social, economic, and political issues. Consequently, talented young people must be treated as treasures by Kentucky. The state's colleges and universities must take special steps to challenge talented students so that a large proportion of them will stay in Kentucky for their educations and, it is hoped, for their productive work lives. In many points in this report we address special services for these students: special scholarships, endowed chairs to enhance teaching excellence, emphasis on teaching on the part of the faculty, admission policies, and many others.

Recommendations

Colleges and universities must be provided with incentives to offer special programs for talented students. Such programs might include honors programs in which highly talented students are encouraged to interact with special faculty and with one another; close contact with instructional staff through small classes and seminars, foreign study, and travel; independent research; and special fellowships, internships, independent study, and others.

Over time, the elimination of programs for specially gifted students or the failure to develop those programs because of financial stringency will weaken Kentucky's entire system of higher education. Institutions must protect these programs.

Recommendation Regarding A Fund for Academic Excellence

Special funds in the form of a permanent endowment should be provided and used for specific activities designed to inspire excellence across Kentucky's entire system of higher education. Such funds would be used to encourage talented Kentuckians to stay within the state for their higher education, to attract nationally respected scholars and teachers to Kentucky, to stimulate new levels of faculty research and innovation, and to support innovative instructional programs and approaches.

Recommendation

The Commonwealth, by special appropriation of the Legislature, should establish a "fund for academic excellence" to be used as a permanent endowment for higher education in Kentucky. The fund would be available for the following purposes:

Scholarships

A "fund for academic excellence" would provide scholarships to exceptionally qualified undergraduate students without regard to financial need or age. The scholarships would be awarded on a competitive basis by statewide standards developed by the Council on Higher Education in consultation with public and private colleges and universities; be available to any qualified Kentuckian without regard to financial need or age for undergraduate education at any higher education institution licensed by Kentucky and within Kentucky; and be of an amount adequate for education at

the baccalaureate level. The amount would be based upon a formula that provides a substantial enticement but that also reflects educational costs and available resources.

Endowed Chairs

A "fund for academic excellence" would be used to endow professorial chairs at public universities so that scholars and other individuals of the highest ability and national prominence can be attracted to and retained by Kentucky's public universities. Enough financial support should be provided to underwrite the costs (in addition to salary) needed to attract eminent scholars and other individuals, including those for secretarial support, research assistants, travel, and related expenses. This endowment would be used to attract outstanding scholars, public figures, artists, or practitioners of professions or crafts and would not be limited to individuals with traditional academic and scholarly credentials. Steps should be taken to ensure that all public universities benefit from such a program, although absolute equality of distribution would be impossible to achieve.

Diversity in the arrangements for such chairs is necessary; therefore, chairs might be created in the following ways:

- **Permanent chairs** to attract scholars of such distinction that an entire academic program or department at a particular university might be built around their presence.
- **Rotating chairs** to attract exceptional individuals for a limited period of time (approximately one year or less) for special teaching, research, or public benefit. This category might include public officials, such as former governors or federal officials, writers, journalists, artists, and others.
- **Commonwealth chairs** to attract individuals who might spend time at more than one institution and in traveling, teaching, offering university and public lectures or performances, or other public services. (Such individuals might be attracted by such a statewide role while a one year appointment at a particular univer-

sity might be less attractive to them. The person occupying this chair would be in service to the entire Commonwealth through one or several institutions.)

- **Distinguished teaching chairs** to attract individuals with nationally recognized ability as teachers or as practitioners of particular crafts (such as artists or writers) on a temporary basis.

Exceptional Faculty Performance

A "fund for academic excellence" would be used to encourage and reward exceptional faculty performance in teaching, research, and public service. Such awards would be determined by peer evaluation and review processes at each university and awarded by each university, but they would not be substitutes such as counseling and entry level services for institutional support. These awards would also support distinguished scholars and teachers so that they might spend up to one year in special service to their institutions and colleagues or in professional improvement activities. Such awards would be made through a process of peer evaluation on a statewide basis.

Institutional Improvement

A "fund for academic excellence" would be used to provide special incentives to universities and colleges to improve curricula, improve teaching, or develop experimental or creative approaches to meeting student needs. Such awards would be made available to public universities, be limited in the total amount of the grant and in its duration, and be awarded through a statewide competition that would use evaluators outside Kentucky. Activities to be given special attention would include special academic programs and services for highly gifted students or nontraditional learners; instructional programs that require special expenditures such as independent study, student research, and internships; special services such as counseling and entry-level services for nontraditional or older learners; or efforts to develop new means for effectively evaluating academic programs.

ACADEMIC PROGRAMS— CHALLENGE AND OPPORTUNITY

Kentucky's universities and colleges—public and private—are many things to many people. Throughout this report the Prichard Committee on Higher Education in Kentucky's Future discusses myriad opportunities and challenges available to Kentucky and its citizens through the instruction, research, and public service functions of the state's institutions. For the most part, Kentuckians can be justifiably proud of higher education in their state. Thousands of Kentuckians are better educated, possess degrees ranging from the associate through the doctoral and professional level, and are more effective citizens because of the efforts of the state's institutions of higher learning.

Here, we direct our attention to academic offerings for which we have special concerns or that require specific attention. Nowhere in this report have we attempted to discuss all degree programs. However, it is important to discuss graduate programs (at the master's and doctoral levels), professional education programs (dentistry, law, and medicine), programs and delivery methods for nontraditional students, and instructional programs for professional enrichment.

While many of these programs serve a relatively small number of students, the demands these programs make on the state's resources are significant. This Committee's discussions and recommendations about these programs are aimed at assuring that available resources are used in a way that is most advantageous to Kentucky.

Kentucky's universities have increased the number of their graduate offerings over the years. These increases have resulted in the duplication of graduate programs, particularly at the master's level, and to some degree at the doctoral level. Although all eight public universities are authorized to offer master's level programs, only two universities (the University of Kentucky and the University of Louisville) have authorization to offer doctoral level programs.

Access and choice to academic programs are paramount considerations at the undergraduate level. An appropriate array of undergraduate programs should be available at each public university. At the master's level, access and choice, while important, are not paramount considerations. The state should provide a reasonable number of educational opportunities at the master's level but need not provide these

at all or most institutions. The state's approach to establishing programs at the doctoral level should be much more conservative than its approach to establishing bachelor's and master's programs.

Graduate Education: Master's Programs

The central problem in considering master's level programs is determining whether or not the duplication of a program is "necessary" or "unnecessary." All eight universities are authorized to offer master's level programs, and the number of these programs has increased over the years. In 1981 the Council on Higher Education completed a review of master's programs in the public system. The Council's official degree program registry, which resulted from the review, lists 336 master's and specialists degree programs. Many of these are teacher education programs, reflecting in part existing teacher certification statutes that require teachers to obtain graduate degrees. Of the 4,317 master's degrees conferred by Kentucky institutions in 1980, 58.5 percent were in teacher education. (This Committee has discussed qualitative issues regarding teacher education and preparation in the subsection, "Focus on Quality.") The preponderance of master's programs in education at the regional universities is probably related to the origin of these institutions as teachers' colleges. However, these institutions, after gaining legislative designation as regional universities, then developed and initiated graduate offerings at the master's level in a variety of disciplines in addition to education, including agriculture, communications, and certain health fields.

The central issue in education at the master's level is whether or not the duplication of a program is necessary or not. Duplication does exist but is considered justified if determined to be "necessary" by the Council on Higher Education. The Council's recent degree program review did not rule fully on various duplications. Therefore, with the proliferation of master's programs and the demands upon limited resources such programs make, it is time for consideration to be given to necessity in the new program approval process and in the review of existing master's programs.

The extent of master's offerings and the quality of these offerings must be measured against their costs. **The taxpayers of Kentucky cannot afford costly competitiveness and unnecessary proliferation of programs at the expense of a more effective organization of program offerings throughout the state.**

In some instances a master's degree has become a requirement for permanent certification in an occupation or profession, and some professions are moving toward the master's degree as the requirement for "entry into practice." Perhaps the public should take a critical look at such requirements: Is the body of knowledge necessary for safe and effective practice available only through a graduate degree? Some people suspect that a master's degree requirement is a form of "professional expansionism" encouraged and supported by practitioners. Legislators should be sensitive to the societal benefits of required master's degrees before voting to mandate such requirements upon a profession. Society pays for such requirements, both in costs to support the educational program and, presumably, in increased remuneration to the individual practitioners as a result of their advanced education.

It is essential that the Council on Higher Education and the institutions freely acknowledge the existence of program duplication at the master's level, reach agreement about what constitutes "necessary duplication," and eliminate duplication that is unnecessary. Ideally, "unnecessary" duplication of master's programs would be eliminated by mutual actions between and among the involved universities. Defining "necessary duplication" is especially difficult, however, and the impartial judgment of the Council is necessary to resolve such issues.

While the "quantitative" aspects of a graduate program can be precisely measured, assessment of "qualitative" aspects is more elusive. Quality may be determined by such characteristics as the competency and performance of graduates, faculty qualifications, research and publication, admission standards, program requirements, course and seminar offerings, fiscal resources, equipment and facilities, and the appraisals of peers. While program quality is principally the responsibility of the educational institution, quality must also be of concern to the Council.

Each educational institution has a fundamental responsibility to strive for excellence in each degree program it offers and to assess continually and objectively the quality of those programs. **If making a program excellent would cost more than available resources allow, the institution has an obligation to terminate that program. Fewer programs of higher quality are more desirable than many programs of mediocre quality.**

Graduate Education: Doctoral Programs*

Doctoral programs provide training for research scholars and are the expected outgrowth of highly successful, nationally competitive research programs. Doctoral instruction and supervision, like research, require faculty with established research credentials and with senior level experience. In a comparative sense, doctoral instruction and programs are expensive offerings. The needed faculty expertise, the critical mass of faculty personnel, supporting equipment, materials, and facilities (while varying among disciplines) are costly. Supervision and support of doctoral students and their research training require fewer students per faculty member and, therefore, the cost of instruction is higher than that of undergraduate or master's programs. There are few possible economies of scale available in research oriented doctoral programs. The pursuit of knowledge and the training required to become a proficient researcher cannot, in most disciplines, be justified on the basis of regional or state need alone. **Because of these factors, Kentucky should continue to take a conservative view toward the creation of new doctoral programs. The provision of student access to these programs is not a paramount goal.**

Cooperation among the states and within regions is an alternative to expansion of graduate programs to accommodate student interests. The Southern Regional Education Board's Academic Common Market, an agreement among southern states for sharing academically "uncommon" programs, is a prototype for consideration. Through it, qualified residents from participating states can enroll in specific programs in other states at in-state tuition rates. The common market concept recognizes that it is impractical for every state to attempt the development of programs in every field of knowledge. Each southern state has programs that are not offered in some of the other states and that can accommodate additional students. Through the sharing of such programs, the common market assists in eliminating unnecessary duplication and in increasing access to programs that meet the educational needs of citizens of the South.

*The term doctoral level as used here excludes Doctor of Medicine (M.D.), Doctor of Dental Medicine (D.M.D.), Doctor of Dental Surgery (D.D.S.), Doctor of Pharmacy (Pharm.D.), and Juris Doctor (J.D.).

The importance of access to doctoral education opportunities for Kentuckians cannot overshadow the importance that the institutions, the Council, and the state place on careful stewardship of resources.

Professional Education Programs

First-professional degrees—defined by the Council on Higher Education to include Doctor of Medicine (M.D.), Doctor of Dental Medicine (D.M.D.), Juris Doctor (J.D.), and Doctor of Pharmacy (Pharm.D.)—have several special characteristics that attract public attention. Historically, these characteristics have included the following:

- The demand for admission to professional programs by qualified applicants usually exceeds the enrollment capacity of the programs; therefore, selective admission policies are used.

- The programs are usually more costly than other academic programs. Tuition, books, and fees for the programs are expensive and the programs generally cost the state more to support than other programs.

- Society recognizes its need for the services provided by the graduates of professional programs and has supported public policies that establish and fund such programs through the public sector of higher education.

- The programs, while technically not "graduate" programs, are usually postbaccalaureate programs leading to the "first-professional degree."

- Upon entering professional practice, graduates are often perceived as holding prestigious positions and commanding incomes higher than those of the majority of society.

- Within the university, there is a perception that professional programs (including their faculty and students) enjoy a greater degree of autonomy than do other academic programs.

- There is a perception that the body of knowledge possessed by practitioners is so specialized as to be somewhat "mysterious" and beyond the comprehension of "ordinary" people outside the given profession, therefore requiring that the general public place a high level of faith and trust in the practitioners' competence.

- In addition to the earned degree, state licensure or certification is required for entrance into practice.

This discussion of professional education is limited to the disciplines of medicine, dentistry, and law. In Kentucky, education in these disciplines is provided at two medical schools (University of Kentucky and University of Louisville), two dental schools (University of Kentucky and University of Louisville), and three law schools (University of Kentucky, University of Louisville, and Northern Kentucky University).

The Commonwealth of Kentucky has an obligation to provide reasonable opportunities for professional education in these disciplines. It is important to consider, however, the means the state uses to provide these opportunities, the range of programs to be offered, the number of students in each discipline that the state is willing to support, the rationale for determining those numbers, the number of programs within each professional discipline the state needs (or wants), the location (campus or campuses) of the programs, and the impact these programs have on higher education resources. Also at issue is the priority (or priorities) professional education programs have (or should have) in Kentucky's system of higher education.

The state has demonstrated its desire to provide professional education for its residents. Recognizing the importance of this trained manpower to Kentucky, the Council on Higher Education adopted a policy in 1978 that stated:

> The nonresident (out-of-state) enrollment in the schools of law, medicine, and dentistry at the state-supported institutions operating those programs is limited to no more than ten (10) percent of the total headcount enrollment in each program.

The attention of Kentucky's state government, its educational institutions, and the general population is being focused on the number of

professional programs offered in the state system, the costs of these programs, and the number of graduates of those programs. Informed Kentuckians are questioning the necessity for program duplication in medicine, dentistry, and law. This Committee is satisfied that we have examined professional education in as objective a fashion as possible. Our recommendations call for changes that will be unfavorable to some. Nevertheless, the recommendations presented here represent the majority view of this Committee and constitute our best collective judgment.

Legal Education Programs

There are more than 575,000 attorneys in the United States today. Kentucky has 6,242 (1.1 percent) of the total. At the national level the lawyer population has doubled since 1960 and tripled since 1950. Nationwide, there is now one attorney for every 400 Americans, and there is one for every sixty-four people in the District of Columbia. Ketucky has one attorney for every 593 people.

In 1980 there were 161 law schools fully accredited by the American Bar Association (ABA) and ten provisionally accredited and about fifty unaccredited law schools. The nation's 171 ABA-accredited law schools enrolled 125,397 students in the fall of 1980, a 2.1 percent increase over the previous year's enrollment. Kentucky's three law schools (University of Kentucky, University of Louisville, and Northern Kentucky University) constitute 1.8 percent of the accredited law schools in the nation. The combined headcount enrollment of the three schools in fall, 1980, was 1,487, or 1.2 percent of the national enrollment.

A study of legal education commissioned by the Council on Higher Education in 1976 (published in January, 1977) predicted that "Kentucky will have over 75 percent more lawyers than it will need in the year 2000." The lack of precision in manpower projections is indicated by 1980 data that suggest that this projected surplus will not materialize. However, the error of this projection is only in its magnitude: rather than a 75 percent oversupply, the oversupply is likely to be approximately 40 percent or more, using similar methodology. There seems no doubt that there will be an oversupply that requires public policy decisions.

This Committee knows that all persons with law degrees do not "practice law." Yet, we believe that the central purpose of state supported law schools is to educate lawyers and that the schools cannot be justified without considering the importance of preparing practitioners to serve the people of Kentucky. **Limited resources should not be used to overproduce in one academic discipline at a time when society's needs for people prepared in other disciplines may go unmet. We reject the argument that "legal education is not expensive" and wonder if current expenditures for legal education represent a prudent use of limited public higher education funds.**

We have not evaluated the quality of education being provided by Kentucky's three law schools. We note, however, that at a time when Kentucky appears to be producing an excess of lawyers with the first-professional degree, none of the schools offer graduate level education for attorneys. Is Kentucky spreading finite resources too thinly to expect excellence in legal education? The state's ability to maintain viable education programs in law throughout the next few decades rests in large measure upon planning efforts, the establishment of attainable goals and their priorities, and a willingness to commit and distribute adequate resources to the effort.

The people of Kentucky support the public higher education system primarily for the benefits the system provides to them, be they students or other beneficiaries of higher education services. The Commonwealth has clearly demonstrated its desire to provide professional education programs, such as law, for its residents. **This Committee concurs with the Council on Higher Education that Kentucky's professional schools should provide preferential admissions for resident students and, therefore, endorses the Council's 1978 policy that limits nonresident enrollment in the professional schools to 10 percent.**

The nonresident enrollment of each law school was as follows in 1980-81:

Fall, 1980, Headcount Enrollment

Northern Kentucky University	36.6% nonresident
University of Louisville	12.8% nonresident
University of Kentucky	5.9% nonresident

Spring, 1981, Headcount Enrollment

Northern Kentucky University	35.2% nonresident
University of Louisville	10.6% nonresident
University of Kentucky	5.5% nonresident

We endorse the state's decision to provide legal education opportunities for its citizens. However, extensive geographic accessibility to these highly specialized and advanced opportunities is not necessary.

Dental Education Programs

As this Committee began its early discussions on professional education, it was decided to focus on the disciplines of dentistry, medicine, and law. We were informed that the Council on Higher Education had directed its staff to conduct a study of dental education in Kentucky. Because this study was underway, we first directed our attention to medicine and law.

We had hoped that the dental education study would be completed in time for one of its subcommittees and the entire body to digest it, discuss it, and formulate recommendations for the Council's consideration. Unfortunately, the findings and conclusions of the study were not available when we held our final meeting.

Although we did not have an opportunity to deal with dentistry, this report and the recommendations herein regarding medicine and law are forceful and have implications for the manner in which the Council deals with dental education programs.

Medical Education Programs

Medical education, knowledge and technology have made striking changes at a phenomenal pace over the past three decades. There were eighty-seven medical schools in the United States in the early 1960's. By 1970 there were 101 medical schools with 37,669 students enrolled. Ten years later there were 126 medical schools with 63,800 students enrolled, an increase of 69 percent over the 1970 enrollment. Most of the growth in new medical schools occurred in the South during the 1960's and 1970's. Admission to medical schools in 1979 remained

competitive; however, the applicant pool declined from 43,000 in 1974 to 36,000 in 1979, which resulted in roughly two applicants for each of the 16,930 openings available.

A national declaration of a physician shortage contributed to the growth in medical education. Numerous state and federal legislative initiatives in the late 1960's and early 1970's, designed to increase the number of physicians, were indisputably successful. Principal among these programs was the federal "capitation program," through which a fixed amount of federal money was awarded to medical schools on a per student basis, but only if the medical school increased its enrollment to the level required by legislation. The large enrollment increases beginning in the 1970's were direct results of capitation payments. It is doubtful that these significant enrollment increases would or could have occurred in their absence.

Because physicians tend to establish practices in pleasant urbanized areas and the suburbs, access to medical services for millions in the inner cities and the rural areas of America was limited or nonexistent. Subsequently, new state and federal legislative initiatives focused on improving physician distribution. Programs range from the National Health Services Corps, which requires service in a medical shortage area as payment for financial support of a medical education, to area health education centers, which are designed to decentralize graduate medical education for the primary care specialties.

A recent national study conducted by the Graduate Medical Education National Advisory Committee (GMENAC) predicts that, on the basis of current medical-use patterns, there will be an oversupply of 70,000 physicians by 1990. A limited number of specialties remain undersupplied, but supply in most specialties is said to be adequate or moving toward oversupply. The GMENAC report remains highly controversial, and the strongest criticism of it relates to potential vested interest because the GMENAC was dominated by physicians. Nonetheless, the 1981 GMENAC report was instrumental in federal policy being changed to permit medical schools to receive federal funds without being obligated to increase enrollments.

Kentucky has a particularly colorful medical education history. In his now famous report of 1910, Abraham Flexner tagged Kentucky with the dubious distinction as being one of the nation's "particular rotten spots" for medical education. Flexner's report brought about substantial improvement in the quality of medical education during the early 1900's, and the then private University of Louisville School

of Medicine, organized in 1837, was the only one of five medical schools operating in Louisville to survive the post-Flexner report reform period. In fact, it became Kentucky's only medical school until 1960.

In 1953 a Kentucky Legislative Research Commission study documented a gross shortage of physicians in Kentucky, many unmet health needs in the state, and a large indigent patient population. The study concluded that Kentuckians would benefit from a state supported medical school, and in 1960 the Kentucky Legislature authorized the development of the Albert B. Chandler Medical Center at the University of Kentucky for the purposes of providing medical and dental education. The University of Kentucky medical school graduated its first class of thirty students in 1964. It now enrolls 108 first year students annually and had a total 1980 fall enrollment of 426.

After the University of Louisville became a state supported institution in 1970, its medical school gradually shifted its enrollment from predominantly out-of-state students to in-state students. The University of Louisville medical school enrolls 135 first year medical students annually and had a total 1980 fall enrollment of 567.

During 1979 a special committee authorized by the Legislature in 1978 studied the issues of access to medical education, opportunities for residents of rural Kentucky and ways to influence the distribution of physicians in rural and underserved urban areas. **The legislative committee noted that even with the medical schools graduating over 240 students per year, physician maldistribution remained a serious problem in Kentucky. In addition, residents of rural areas were found to be underrepresented in the medical schools' applicant pool.**

The legislative committee proposed a "package" of legislation that was enacted by the Legislature in 1980. The programs authorized by this legislation include the following:

- A Professional Education Preparation Program administered by the Council on Higher Education. This program is primarily designed to assist students from underserved (mostly rural) areas to become more competitive in the professional school admission process.

- Two freestanding family practice residency programs. This is intended to attack the problem of physician distribution by increasing the number of primary care residency positions in the

state and by locating such residency programs closer to the problem areas.

- A mandate that each primary care resident supported by the Kentucky Primary Care Residency Program (authorized by the 1976 Legislature) spend three months of training in sites remote from the health sciences centers.

The legislation also included recognition by the Legislature of Kentucky's Area Health Education System (AHES), which had existed since 1974 under the coordination of the Council on Higher Education. The AHES program is designed to expose health sciences students to rural health practice, to improve their professional competence, and to attract them to rural practice upon graduation.

Although identified as separate entities, these programs are, in fact, closely coordinated and mutually reinforcing. No single program is likely to be particularly successful. Taken in combination the potential for their success is greatly enhanced. When combined with loan and scholarship programs, the programs represent Kentucky's efforts to improve health manpower distribution.

Medical students have reported that some medical school faculty express a negative view about the Area Health Education System, primary care residencies, and related programs. The influence these faculty have on the students' decisions cannot be underestimated. It is disturbing that certain attitudes are working against the purposes and goals of some innovative health sciences education activities in Kentucky.

Graduate Medical Education Programs

A Council on Higher Education policy that limits enrollments of out-of-state students in medical schools to no more than 10 percent is not unique. All states with public medical schools place limitations on out-of-state student enrollment in a dual effort to educate native sons and daughters first and to train physicians who are likely to stay in the state. However, the state of residency and the medical school attended are but two of many factors that have been found to influence a physician's ultimate practice location. Other influential factors include the size of home town, size of wife's home town (not husband's), location

of graduate medical training, and choice of practice specialty. No one factor is singular in predicting practice location.

Kentucky and many other states require individuals who graduate from an accredited medical school to both pass a licensure examination and complete one year of postgraduate education to be licensed for practice. However, there has been a steady decline in the number of graduates who enter medical practice after only one year of postgraduate education. Most enter accredited medical specialty residency programs that require from three to seven years of postgraduate education.

The average number of first year graduate medical education positions in Kentucky is 200. With the two medical schools graduating 243 people each year, it is readily apparent that Kentucky's medical education programs are not balanced. The number of medical school graduates exceeds the number of first year residency positions by more than 20 percent.

Research on graduate medical education has classified states as either "importers," "deporters," or "exporters" of medical school graduates. Kentucky is classified, along with fifteen other states, as a "deporter" of medical school graduates (that is, Kentucky graduates more M.D.'s than it has first year residency positions for them to complete their training). **Since location of residency training is an important influence on the practice location of a new physician, one way for Kentucky to improve its retention of medical manpower is to create more outstanding residency training opportunities in the state.** For Kentucky to attain a "balance" status, the number of first year graduate medical education residency positions *filled* each year would need to be greater than the number of graduates from the state's two medical schools. However, a simple excess of first year residency positions over the number of medical school graduates in a state will not ensure actual balance since medical school graduates compete in a national market for admission to the graduate medical education programs of their choice.

The total number of first year graduate medical education positions available in the United States has increased in the past several years with the primary care specialties showing the greatest gain. First year primary care positions were increased by Kentucky through the authorization of the Kentucky Primary Care Residency Program in 1976. This program provides for fifty-two resident positions at each medical school.

Kentucky is committed to increasing access to medical education for rural Kentuckians and to influencing the distribution of primary care medical practitioners. As the cost of medical education continues to increase and as federal support for medical education declines, Kentucky must reassess its commitment to first-professional and graduate medical education. Since it is unlikely that state funds will be available to replace reduced or discontinued federal funding, the possibility of reducing enrollments in predoctoral medical education programs should be considered. Reduced medical school enrollments with a concurrent maintenance or increase in the graduate medical education (residency) positions could move the state closer to balance between the number of medical school graduates and the number of graduate medical education positions available and filled.

Nontraditional Students and Programs

Of the undergraduate student population in Kentucky's public universities, 25.6 percent are twenty-five years of age or over and 55.4 percent are women. Only 17.7 percent of students twenty-one years old or younger study part time, but 55.2 percent of older learners (twenty-five and over) attend part time. The trend for older persons to seek postsecondary education is less marked in Kentucky than elsewhere in the nation, but continued growth in this student population, at least for the next ten to fifteen years, can be expected.

This Committee's concern for quality has led it to special concerns about these students. **Adult learners, especially those returning to higher education after many years of work, raising a family, or community service, have needs quite different from those of the young person just out of high school.** Education is not a process that ends with the awarding of a degree or certificate, but is continuing and vital for every person throughout life. This process must be encouraged because of the following reasons:

- In the decades ahead the so-called "information explosion" will require everyone, not just the young, to have the tools to understand new information.

- Advanced education is the key to economic, social, and employment advancement; certain doors are open only to those with college degrees.

- The movement of older learners back to higher education is a trend that will benefit the students, the colleges and universities, and the larger society.

The "traditional" student is eighteen to twenty-two years old, enrolled full time, working for a degree, and attending class on campus during the day. The term "nontraditional" describes students who are usually older than twenty-five, probably have full time jobs (often in the home), are more often women, and usually attend classes part time. Nearly 40 percent of all students enrolled in higher education in the United States are in this category. A recent report by the College Entrance Examination Board states:

> Between 1972 and 1978, the U.S. Bureau of the Census reported a 24.3 percent increase in the proportion of enrolled students over 25 years of age. During the same period, the under-25 age group decreased 9.4 percent. More than one-third of our postsecondary students are 25 years of age and older. More than 50 percent of the increased enrollments in two-year colleges and more than 33 percent of the rise in undergraduate enrollment in four-year colleges and universities from 1970 to 1977 were older students. . . . Their enrollment in colleges and universities between 1968 and 1978 nearly doubled. The U.S. Bureau of the Census found that about 2 out of 3 older students attended college part-time in 1977, while only 1 in 10 of the 18- to 21-year olds attended less than full-time. . . .
>
> By level of enrollment . . . the part-time student body has grown in recent years to represent more than 30 percent of the nation's undergraduates, about 60 percent of all graduate students, approximately 10 percent of first-professional degree students, and an estimated 85 percent of students not classified by a degree status. . . .
>
> Part-time enrollments comprise 61.3 percent of the two-year college population, compared with only 29.3 percent at four-year institutions. Between 1968 and 1978, part-time enrollments at two-year colleges tripled, while at four-year institutions the increase recorded was only 42.8 percent.

Because of their circumstances, older students may require conveniently scheduled courses or modified teaching approaches with more self directed learning. Essential student services, including counseling,

registration, and advising as well as routine campus functions such as security, must be available at unusual hours.

Many innovative and successful approaches have been developed nationally for older students who are bound to a geographic place and not located close to a college campus: weekend colleges, "extended" campuses, external degrees, "open universities" using television instruction, and "workplace instruction," among others. While there has been much progress in making opportunities available to these "new" students, institutional goals and operations frequently have remained directed toward the "traditional" student. It is argued that institutions that have not accommodated nontraditional students must modify instructional methods and curricular requirements in a manner that recognizes the different needs and objectives of those students. Modifications may include credit for experience; an emphasis on "competencies" mastered, as opposed to routine course requirements; different instructional approaches; weekend colleges; television courses; or reduced residence requirements. The quality of instruction is expected to be maintained.

K. Patricia Cross, a nationally recognized researcher on adult education, has argued that simply waiting for adult students to appear at the college doors serves no one well:

> Only a dying and unimaginative industry attempts to build its future based on consumer demand. Consumers cannot respond beyond their experiences; thus, responding to consumer demand usually means getting yesterday's answers to tomorrow's questions. The new clientele will be attracted to higher education to the extent that we can formulate new programs, perhaps undreamed of by potential learners, that strike people as a better way to do things.

States or regions with high enrollments of nontraditional students know that making programs available and informing the public about these programs result in substantial student interest. Although Kentucky's universities have long traditions of providing continuing education and evening programs for adults, no external degree programs are offered. Additionally, "self directed" learning programs are limited; Kentucky institutions are reluctant to award credit to adults for what they may have learned prior to enrollment in college; and there are no weekend colleges for undergraduates at our public universities (although some are under discussion).

This Committee expects Kentucky's population in the years ahead to demand a level of higher education services corresponding to national trends. The state must, therefore, be prepared to meet these demands and to take advantage of this opportunity to increase the educational level of Kentucky citizens.

From these general concerns, the following issues will demand special consideration:

First, the citizens of Kentucky desire an educated population. The clear responsibility of higher education to serve the educational needs of all the citizens of Kentucky, regardless of age or employment condition or economic status, must be established. To ignore this responsibility is to assume that Kentucky's population is adequately educated for future needs. Therefore, the process for determining the budget for universities should reflect the needs of a system with a changing student population. The state's commitment to nontraditional students should be reflected in a high priority assigned this activity when funding levels are being determined.

Second, the needs of nontraditional learners vary in several substantial ways from those of traditional students. These students may require course offerings at times other than during the day or during the normal five-day week, programs offered closer to their places of residence or employment, and special academic offerings compatible with what they have already learned through previous education or life experience. To be efficient and productive, educational programs must be flexible, yet retain the level of quality of those provided to traditional students. Kentucky must provide resources so that universities can respond to nontraditional students with increased program flexibility.

Third, the serving of large numbers of nontraditional students on traditional campuses requires that adaptations and adjustments be made in such areas as faculty teaching styles and faculty compensation, counseling and advising, child care, entertainment, and parking and security. It is likely that special incentives are needed to encourage these adaptations and to break the "business-as-usual" pattern.

Fourth, part time and nontraditional students represent an increasingly important factor in higher education enrollment, and this importance will increase in the future. An important segment of the student body for some institutions will be those seeking part time and nontraditional study. Competition for these students among institutions, both public and private, may increase. Special efforts will be needed to protect the interests of students as consumers and to ensure that high quality programs are offered.

There will be increased need for the Council on Higher Education to deterine how extensively academic programs should be offered in widespread geographic locations and which programs should be limited to particular institutions or locations. The Council should provide incentives to encourage cooperation in the offering of programs for adults by private and public colleges and universities. Cooperative efforts with noneducational institutions such as employers, governments, and community groups, should also be encouraged.

Fifth, programs for nontraditional learners can probably be effectively offered on a statewide basis through innovative instructional design and the use of modern technology. In England the "open university" is a degree granting institution with no admission criteria and no campus. It uses a variety of nontraditional instructional forms, such as independent study and correspondence courses, and has been quite successful. The feasibility and desirability of similar approaches in Kentucky should be examined.

Sixth, limited available information about educational institutions' programs, costs, financial aid, admission procedures and related matters is a major obstacle to some older learners. The beginning adult student who is seeking information often has neither the time nor the tolerance for the bureaucratic abuse that many younger students have been conditioned to accept as a necessary inconvenience of the educational process. The adult learner may retreat upon the first encounter with a hostile or indifferent educational bureaucracy. Sensitive and effective ways of getting information to potential adult students must be devised.

Seventh, the efforts of Kentucky's universities to serve nontraditional learners may be more productive if done in collaboration with

others engaged in similar activities. Thousands of adults are regularly engaged in educational activities in settings other than colleges and universities. People continuously learn at work; through community education programs; from privately sponsored courses and seminars; through television, churches, YMCA's and YWCA's; and in many other ways. A massive system of adult and vocational education is also administered by the Kentucky Department of Education and local boards of education. Methods of encouraging cooperation should be explored. Positive incentives for private employers to work cooperatively with universities in the provision of training programs should also be considered.

Eighth, there will be increased demands for the improvement and enhancement of the status of women in all areas of academic employment and governance: teaching, student services, athletics, administration, and governing board membership. Recent statistics show that over 50 percent of American college students are women and that the largest proportion of the nontraditional students is women. Kentucky and its universities must plan to meet this increased demand.

Professional Enrichment Activities

"Professional enrichment courses" are those instructional activities that are not offered for degree credits but are used to enhance professional skills and improve abilities or skills already attained, perhaps after a degree has been earned. "Professional enrichment" may take the form of workshops, conferences, institutes, short courses, seminars, and special training programs.

The need for professional enrichment is rooted in the dynamic nature of American society. Technological advances occur at a rapid rate, and practitioners in affected fields must keep up with new technologies or developments. New knowledge must be incorporated into current practices. Business and government encourage and pay for employee participation in enrichment programs and have added to the continuing education movement. Third-party payments have increased the interest of educational institutions and other organizations in providing professional enrichment activities.

The involvement of higher education in professional enrichment activities is not new. The Cooperative Extension Service, which was created by the federal government in 1914, was charged with transmitting existing and new knowledge to people in rural areas so they could improve their standard of living and increase agricultural productivity. The success of this endeavor is demonstrated by the rapidity with which new technologies and knowledge are applied to animal and crop production. Colleges and universities traditionally have also been called upon by their graduates to provide short term instruction in recent developments: Attorneys turn to law schools, physicians look to medical schools, accountants and managers seek out schools of business, and engineers look to schools of engineering. Such instruction may be provided through university sponsored activities or by faculty hired by a professional association that offers the training session.

Professional enrichment activities—frequently referred to as continuing education—are of two basic types: "mandatory" and "voluntary." Mandated continuing education is connected with licensing procedures, and participation in a specified number of "hours" or the attainment of a prescribed number of "C.E.U.'s" (continuing education units) is required for annual license renewal.

Required continuing education is one means by which professional licensing is maintained. **Where the public welfare is concerned, however, the true value of continuing education is the continued competence of the professional. But participation in continuing education activities does not inherently ensure a professional's competence. Too often, great effort is given to the means (continuing education) and little or no attention given to the purpose (the maintenance of competency). It is sometimes argued that the public would be better served if periodic proof of competency, rather than continuing education, was mandated or required.** There is a need to ensure that reasonable standards of competency are established prior to any mandate for "proof of competency." Once proof of competency is required for relicensure, "mandatory" continuing education will become obsolete, but professionals' demands for truly valuable educational offerings very likely will increase.

In most cases, legislation that requires participation in continuing education for license renewal is vigorously promoted by the profession being regulated. Therefore, many people maintain that the professionals, as proponents of the legislation and as major beneficiaries

of the education, must assume responsibilities for the costs associated with the instruction. Others maintain that the state, by mandating continuing education, must also assume responsibility for some of the costs, particularly since there is a presumed public benefit.

Voluntary continuing education is that which is sought by the individual motivated by reasons other than "legal professional survival." Professional associations have long encouraged their members to be active participants in continuing education. Voluntary continuing education programs are frequently offered as a benefit of membership in an association or society, with the participants sometimes supporting the program by the payment of fees.

Subjective and objective evaluations of continuing professional education frequently question the effectiveness of programs, whether mandated or voluntary. This questioning may lead to changes in forms of continuing education, but it is doubtful that continuing education as one method for maintaining professional competence will be eliminated. It is a needed commodity that is increasing in magnitude and complexity. It seems reasonable to assume that educational providers will attempt to be responsive to the requests of professionals for continuing education.

This Committee has identified four basic issues in continuing education:

First, the appropriate role of public higher education in the development and provision of continuing education offerings must be determined. It must be recognized that many professional organizations and for-profit corporations are providing continuing education services similar to those provided by institutions of higher education.

Second, when continuing education is required by statute for continued license to practice a profession, the responsibilities of the state to provide the education must be determined.

Third, it is likely that higher education will continue to be a significant provider of continuing education. A determination of whether this enterprise should be totally self supported by fees generated, totally tax supported through state appropriations, or partially tax supported is a substantial public policy matter.

Fourth, the question of whether society is best served by the concept of "continuing professional competence" rather than that of "mandated continuing education" needs to be considered and an answer determined. If continued competence is to be mandated by law, higher education must provide some leadership, and professional schools should emphasize the concept of "lifelong learning" in support of continued competence. Kentucky's colleges and universities must instill in their students a desire for continuing self education. In this case, the colleges and universities have three major instructional responsibilities: education of undergraduates, education of graduate and professional students, and the continuing education of the work force to assist it in keeping abreast of new developments in various fields.

Recommendations Regarding Graduate Programs

MASTER'S PROGRAMS

The Council on Higher Education recently completed a review of master's programs in the public institutions. However, this review did not determine the "necessity" or "lack of necessity" for program duplication among institutions. Therefore, at this time there are no firm criteria upon which to determine whether or not duplication among master's programs is necessary or unnecessary.

Recommendations

The Council on Higher Education should initiate a study of master's programs, giving specific attention to the identification of program duplication. The study should be conducted in consultation with the educational institutions. The results of the study should be used to develop criteria for the identification of necessary and unnecessary program duplication. These criteria should be used to eliminate those programs that are found to be unnecessarily duplicative.

No single set of criteria for determining "necessity" can be developed, and different sets of criteria may be needed for different academic disciplines or program categories or degree levels. Although the study may be a lengthy and complex undertaking, it is sufficiently central to this Committee's purpose to warrant a strong recommendation that it be done.

In the absence of strong evidence that the duplication of a program is "necessary," the Council should declare it to be "unnecessarily duplicative" and, in the case of a requested new program, deny its approval. In the case of an existing program that is declared to be "unnecessarily duplicative," the Council should withdraw approval, and the institution affected should accept no new students into the program and terminate it when enrolled students have completed their studies.

As a component of more rigorous review criteria for master's programs, the Council should consider a concurrent review of related undergraduate programs. Particular attention must be given to those graduate and related undergraduate programs that are considered "high cost" (for example, engineering and some allied health professions). To prevent unwarranted drains on the limited resources of higher education, duplication of high cost programs should be permitted only upon strong documentation of the need for duplication.

The Council should determine what new programs are needed in the Commonwealth and recommend their establishment at the appropriate university or college.

To encourage institutional flexibility and innovation, the Council should, when it reviews new program proposals, give special attention to previous efforts of an institution to eliminate unnecessary programs or to develop cooperative and innovative programs.

DOCTORAL PROGRAMS

Two Kentucky universities offer doctoral instruction, the University of Louisville (seventeen programs) and the University of Kentucky (fifty-four programs). The most recent Council reviews of doctoral programs were completed in January, 1977, and May and July of 1979. The state's approach to establishing doctoral level programs should be much more conservative than that for bachelor's and master's programs.

Specific existing doctoral programs should be reviewed continually and new ones adequately planned to ensure that they respond to state and national manpower needs. Such programs recruit students on a national basis and, therefore, must be evaluated in comparison to national data and to programs at major graduate institutions. The quality of the research base for such programs is of extreme importance.

Recommendations

Access to doctoral education for Kentucky residents should be accomplished through provision of a limited number of programs at two institutions, continued use of the "common market" approach, and contractual arrangements with nearby states.

The avoidance of duplication should be foremost in the planning and approval of new doctoral programs. The Council on Higher Education should be extremely conservative in its approval of new doctoral programs, whether duplicative or not.

In both the review and approval processes, the Council should clarify the distinction between "necessary" and "unnecessary" duplication. To arrive at this distinction, the Council should consider manpower needs, student demand, and faculty expertise. In some instances, such considerations might indicate that duplication is necessary.

The continuation of existing doctoral programs should be equated to need, maintenance of quality, reasonable levels

of efficiency, faculty expertise and research, and the avoidance of unnecessary duplication.

A new doctoral degree program should be approved only when there is a research program of the stature necessary to support it. Institutions with doctoral programs that have weak research bases should take immediate steps to improve the research program or should terminate the degree program.

Recommendations Regarding Professional Education

In the text of this report, this Committee presents its views on professional education. We speak specifically to the disciplines of medicine, dentistry, and law and offer recommendations accordingly. Access to professional education, like access to doctoral education, need not be Kentucky's primary goal. Public policies that limit enrollments in medicine, dentistry, and law should be based on the projected needs for professional manpower and on the availability of financial resources.

Recommendations

The Council on Higher Education should adopt a policy requiring that professional school enrollment limits be related to the projected needs of Kentucky for professional manpower and to available state financial resources and not upon the desires of qualified individuals to enroll.

The Council should enforce its 1978 policy that limits nonresident enrollment in schools of law, medicine, and dentistry to 10 percent of the total headcount enrollment at each.

Recommendations Regarding Legal Education

Many students desire admission to a legal education program in Kentucky, and enrollment limits may prevent some qualified applicants from gaining admission. This situation is not an undesirable one, for the unique characteristics of professional programs place special financial demands upon the state. Additionally, the characteristics of professional programs place responsibilities upon the institutions to set enrollments in accord with the state's need for the manpower, rather than on demand from qualified students.

This Committee supports the Council's policy that limits nonresident enrollments in the state's law schools to no more than 10 percent of the total headcount enrollment at each institution.

Geographic access to professional programs is not a paramount concern, and professional school enrollments should be determined by the state's need for manpower with specialized training. Throughout this report, we ask that Kentucky use its resources to improve the quality and scope of programs. Because we believe legal education opportunities in Kentucky exceed the state's needs now and in the foreseeable future, we make the recommendations that follow.

Recommendations

One Kentucky law school should be phased out, with the decision about which it should be based upon criteria established by the Council on Higher Education. The transition from three law schools to two should be accomplished in a fashion that is minimally disruptive to students, the educational institutions, and the Commonwealth.

The remaining law schools must revise their curricula to make up for the total reduction in legal education opportunities. They must also make special efforts to serve "nontraditional" students through the provision of evening programs and other "nontraditional" approaches.

Recommendations Regarding Medical Education

Movement toward "balance" between the number of medical school graduates and the number of first year graduate medical education positions through the reduction of medical school enrollments *and* the increase of graduate medical education opportunities is felt to have great potential for giving Kentucky maximum benefits, in terms of physician manpower retention and availability, from the dollars invested in medical education. This Committee believes this is so because medical school enrollment growth resulting from the federal capitation program has placed substantial stress on the physical facilities for medical education in Kentucky. Massive new capital construction to alleviate this stress is unrealistic.

Providing high quality "specialty" training for medical school graduates is important, but these opportunities should match those specialties most needed in Kentucky. Therefore, medical schools should examine the current mix of specialty training opportunities in Kentucky for the possibility of reassigning resources to more needed specialties.

The geographical location of the residency positions may be just as important to achieve medical manpower distribution goals. Programs to improve medical manpower distribution in Kentucky will not immediately produce significant results. Therefore, the very recent efforts to increase the number of students from underserved areas who attend medical school should be continued with the understanding that the results will come seven to twelve years in the future.

Recommendations

The Commonwealth should establish the goal that by 1986 Kentucky will have "balance" (or be an "importer") between the number of medical school graduates and the number of graduate medical education positions available and filled.

To achieve the goal by 1986, the two medical schools, beginning with the 1983 entering class, should initiate incremental reductions in enrollments. As enrollments are reduced, addi-

tional graduate medical education positions should be created to achieve "balance" or "importer" status for Kentucky. Finally, in response to a need for more effective medical manpower distribution, top priority should be given to the development of new graduate medical education positions through the Kentucky Primary Care Residency Program and the Freestanding Family Practice Residency Program.

The medical schools, through their administrators and faculty, should promote vigorously the medical manpower distribution programs created by the Kentucky Legislature. They should do this by providing encouragement to students to enter the programs; by providing accurate information about the programs to students; by speaking on behalf of the programs before university, professional, and community groups; and through other means devised by the universities.

Recommendation Regarding Dental Education

Many concerns relating to dental education have been expressed to this Committee. Unfortunately, the timing of the Council's dental education study prevented us from using the study's findings to examine dental education carefully.

We have offered some guidance applicable to dental education in our recommendations on professional education enrollment. These relate to the state's needs for professional manpower, the availability of financial resources for professional programs, and the admission priority given to residents. Our recommendations on medicine and law have implications for dental education as well.

Recommendation

When its dental education study is complete, the Council on Higher Education should give it prompt review and act in an expeditious manner to resolve the issues identified.

Recommendations Regarding Nontraditional Students and Programs

Over the past decade the numbers of adults ("nontraditional" students) in colleges and universities have grown much more rapidly than the numbers of younger students. This trend is likely to continue for at least the next ten years and will serve to enlarge the educated and productive population in Kentucky. Older learners' needs, however, are different from those of recent high school graduates.

One major obstacle to adults seeking higher education is the lack of access to useful information about educational opportunities, admission and financial aid criteria, program requirements, and transfer guidelines. In addition, adults often need special guidance and counseling, advising, "catch-up" or study skills programs, and other services in their return to postsecondary education. Often, however, these services are not central to a university's view of its mission or are not adequately supported.

In the past, student demand in Kentucky has led to the proliferation of academic programs. Increased numbers of geographically bound adult or part time students, however, do not mean all university programs need to be offered in all parts of Kentucky by traditional means. Ways of reaching students by nontraditional means should be developed.

Recommendations

The Commonwealth should adhere to the principle that education is a process that should continue throughout a person's life.

To serve nontraditional students, "nontraditional" educational approaches are often valuable supplements to regular offerings. Universities should continue to experiment with alternative methods of delivering services to adults. These approaches might include the scheduling of more regular classes in the late afternoon and evening; weekend colleges; "external degree" programs; courses offered where people work through agreements with employers and labor unions;

increased cooperation among institutions (for example, the University of Louisville, Kentucky State University, and the University of Kentucky are each within a fifty-mile radius that contains about 60 percent of the state's population. Cooperation among them in serving adults through shared staff, resources, and facilities is desirable.); increased use of electronic communications and the media; and experiments such as the "open university" concept.

So that adults can get the information they need to participate in higher learning, the Council on Higher Education should ensure that the Educational Information Center (or a similar information program) is supported and charged to work with universities in providing the adult public with helpful information.

The Council should encourage, through incentives, community based organizations to work cooperatively with public universities and independent colleges in experimenting with "educational brokering services" or similar activities.

Special advising, counseling, and "refresher courses" for adult students should be supported and provided. Faculty should be given the training necessary to improve their approach to teaching and advising these students.

Care should be taken that adult students are protected as consumers. The Council should carefully attend to its responsibility for the licensing of degree granting institutions and for the disseminating of consumer information to protect the public.

The Council should continue its philosophy that it is not desirable that all programs be offered on all campuses. It should encourage creative and cost effective means for universities to teach adults through cooperative degree programs, electronic means, and so forth. As concrete illustration of how this can be accomplished, the University of Kentucky in its role as the governing board for the Community

College System should take all steps necessary to ensure that Jefferson Community College becomes a full member of Kentuckiana Metroversity, a consortium of six institutions of higher education in the Louisville metropolitan area. Increased cooperation between and among public and private institutions is desirable.

The Kentucky Higher Education Assistance Authority should identify any aspects of Kentucky's student financial aid programs that discriminate against adults and eliminate those barriers.

Because women make up a majority of the older learners returning to higher education, universities should assess their services and programs to identify problems and ensure that the special needs of mature women students are met.

To encourage the development of special services and innovative approaches such as those above, incentive funding for them on a competitive basis should be established by the Council.

Recommendations Regarding Professional Enrichment

During the last decade a sizable increase in the variety of professions and occupations adopting mandatory continuing education requirements (e.g., nurses, pharmacists, dentists, realtors) has occurred. Consequently, there has been an increased demand for continuing education offerings, and many of Kentucky's higher education institutions have responded to this demand.

Continuing education is a personal activity, and the participant is the major beneficiary of the learning experience. This Committee acknowledges the benefit to society as well, but does not believe that society has an obligation to pay for the benefits to participants through tax support for the instructional offerings. In this regard we make no distinction between voluntary and mandatory continuing education programs.

Recommendations

The institutions of higher education should develop and provide continuing education programs in accord with their institutional missions and within areas in which they have disciplinary expertise. These programs should be commensurate with consumer needs.

The quality of these offerings should be regularly evaluated by providers and participants and through periodic outside professional evaluation.

Higher education should maintain its primacy as a provider of continuing education on the basis of the quality, access, and reasonable cost to participants of the programs it provides.

Public higher education institutions, as public service organizations, should be familiar with all statutory requirements for continuing education.

All higher education institutions should recognize the importance of fully coordinating these activities. They should take positive steps to avoid costly duplication by sharing faculties and facilities, by minimizing travel requirements for faculty and participants, and by cooperating with other institutions to prevent competing program offerings within geographic areas.

The cost of developing and providing continuing education should be recovered by fees charged to participants to make the programs self supporting. The question of whether society is best served by the concept of "continuing professional competence," rather than that of "mandated continuing education," should be explored and an answer determined.

Colleges and universities should incorporate the concept of lifelong learning into their instructional offerings for all students, beginning with freshmen.

- All students should be informed of the value and implications of competency maintenance and adherence to ethical principles throughout their professional lives.

- The state Legislative Research Commission should be encouraged to study the benefits society actually receives as a result of statutorily mandated continuing education for certain professions and occupations. The Legislative Research Commission should also be asked to examine and evaluate alternatives to mandatory continuing education that would result in protection for the public health and welfare. Specifically, these alternatives should include, but not be limited to, periodic proof of competency; scheduled professional recertification; and development of standards of practice with performance judged by objective peer evaluation.

THE FACULTY INVESTMENT

The faculties of institutions of higher learning are charged with developing, molding, and nurturing a productive and literate state and nation. The relationships between faculty and students are the heart of higher education. When these relationships are healthy, the system is healthy. When low morale, stifled creativity, inadequate rewards and diminished self esteem enter the system, the consequences can be severe. The citizens of Kentucky must recognize the gravity of the responsibility placed upon faculty and consider ways in which they, in turn, can meet their responsibilities to faculty.

This Committee is concerned about how well Kentucky is carrying out its responsibility as the employer of approximately 20,000 individuals in higher education. **We believe the vitality of Kentucky's institutions of higher learning has been threatened because of the difficulties encountered by faculty and staff over the past decade. Morale is low, creativity is being stifled, some of the most highly skilled and qualified faculty may leave the state or higher education for other employment, and it is extremely difficult to employ qualified faculty members in certain highly competitive fields.**

Because the future demands adaptability and flexibility, the increasing age of faculty is potentially a serious problem. Nationally, the largest number of faculty is now in the age group of thirty-five to forty-four; in the year 2000 the largest number will be in the age group of fifty-five to sixty-four. **Because minimal turnover and retrenchment currently discourage entry into faculty ranks, shortages of young scholars in many fields will worsen by the late 1980's, and a whole generation of young scholars may be lost.**

The majority of current faculty are in the middle years of their careers; many are tenured. They began their careers in the period of phenomenal higher education growth that lasted from the late 1950's to the early 1970's, a time when the contributions that faculty as experts could make to the nation were valued highly.

Now, however, there is a gap between the earlier expectations of this generation of scholars and the reality of their current roles. Undergraduate students who are poorly prepared for academic work require faculty to give more as teachers. Increasingly complex and often bureaucratic decision making within universities requires faculty to spend more time working on institutional administrative matters. Positive societal views of faculty's contribution of expertise to the nation have diminished. Salaries have not kept pace with inflation. Faculties are getting less in job satisfaction, real rewards, and public appreciation.

Russell Edgerton, president of the American Association for Higher Education, observes that the time has come to rethink some fundamental assumptions about the nature and rewards of faculty careers. Faculty today are captives of the history of American higher education, which Edgerton outlines:

> There was the English model, carried over to our elite private colleges in New England, that a professor was a teacher of mental discipline and manners. For this, a curriculum in the classics was quite appropriate. It wasn't that we thought the sons of the gentry needed to go around speaking Greek and Latin; rather, the process of learning Greek and Latin would give them the intellectual discipline appropriate to tackle other problems.
>
> There was the Scottish model of the professor as a teacher of useful knowledge to anyone qualified to learn. Scottish universities were public, not private corporations, like Cambridge. This tradition was carried over to American land-grant institutions in the 19th century.

> Finally, there was the German model, brought to America by Johns Hopkins, of the professor as research scientist. His first interest was the pursuit of science, the expansion of knowledge. As an adjunct to this role, he taught students.
>
> Scientism, or the Johns Hopkins University model, triumphed. By 1920, America's prestige research universities were all organized around the support of professors, grouped into departments, devoted to extending the knowledge of a given scientific discipline. When World War II came to an end, the Harvard's, Stanford's, Berkeley's, Hopkins', and other major research universities were the centers of the academic universe, providing the model of excellence which everyone else wanted to follow. When the university expanded in the 1950's and 1960's, the professors in some 25 leading research universities trained the graduate students who fanned out all over the country to staff the new and growing colleges and universities.

Over the last twenty years, hundreds of American universities have tried to replicate the "Johns Hopkins University" model. A single model of faculty service was, therefore, inappropriately spread throughout the higher education community, accepted by young scholars entering the profession, and endorsed by the multitude of colleges aspiring to excellence.

Achievement in an academic discipline became the primary channel for faculty career advancement and mobility. Faculty members are primarily scholars in their disciplines; professional recognition comes through accomplishment recognized by peers all over the nation. For most, loyalty to and recognition by their employing university is a secondary reward. Because recognition in an academic discipline determines a faculty member's place in the academic "pecking order," moving on to new locations and to more prestigious institutions was the most important way of growing and advancing. **Now that many institutions of higher education have stopped growing and faculty positions are scarce, faculty members find themselves immobilized. Young, ambitious faculty increasingly are locked out.**

Faculty members sometimes have three separate career tracks. There is the disciplinary career, which begins with graduate school training in a specialized field and hopes for scholarly contribution to the field; an institutional career, which includes employment at one or more institutions of higher learning; and an external career, which involves work outside the academic setting, such as speaking, government service, or consulting. Over time both the "institutional" career

and the "external" career have become secondary to the "disciplinary" career.

The tradition of the Johns Hopkins research model and disciplinary dominance inhibit change. A uniform profession conflicts with the ideal of diversity of purposes among universities and colleges. Excellence in research, for example, is not likely to be the most desirable qualification for an instrucor at a university or a community college where teaching is the primary mission. **Many faculty must now work with inadequately prepared students, and skills different from those previously associated with university teaching are required of them. The traditional faculty model implies that faculty are interchangeable among institutions, but variation in institutional missions and purposes combined with the disciplinary faculty model prevents them from being interchangeable.**

In academic employment the career ladder is very short; it has only four rungs: instructor, assistant professor, associate professor, and full professor. The most talented may reach the top in ten to fifteen years. However, if a professor reaches the top and finds financial rewards curtailed and mobility impaired, motivation may decrease and demoralization may set in. Regarding these problems, Peter Drucker, Clarke Professor of Social Science at Claremont Graduate School, has observed:

> . . . any type of knowledge work palls if done too long. Our institutions are full of people in their forties who are bored, having done the same thing too long. The worst offenders are perhaps the university faculty, for the simple reason that they [universities] are our most restrictive employers. The young scholar who starts teaching the French Revolution loves his subject; fifteen years later, though still only in his early forties, he is bored with it. The one book he had in him has long ago been written; now he agonizes over two books reviews a year. His lectures are repetitious; even his jokes are dull, though the kids still dutifully laugh. But the rules of academia make it all but impossible for him to teach other periods in history, let alone move out of the history department altogether.[1]

[1]Peter E. Drucker, *Managing in Turbulent Times* (New York: Harper & Row, 1980) p. 129.

Edgerton suggests that higher education institutions must do the following to enhance faculty:

- Examine faculty roles and careers and encourage faculty to examine the relationship between their personal values and what their career expects of them. The "disciplinary" career model will not always be appropriate in the future.

- Examine what faculty can do within colleges, rethink the nature of academic work, and develop creative departures from the traditional academic role, such as community work, internal consulting, and improving teaching. The reward system must reflect these changes.

- Build bridges that will enable faculty to try useful and challenging work outside universities and that will encourage through institutional policies these alternative work activities.

- Rethink existing personnel policies and practices, e.g., the shortness of the rungs in the career ladder; the criteria for evaluating performance; work load, leave, reassignment; and other such policies.

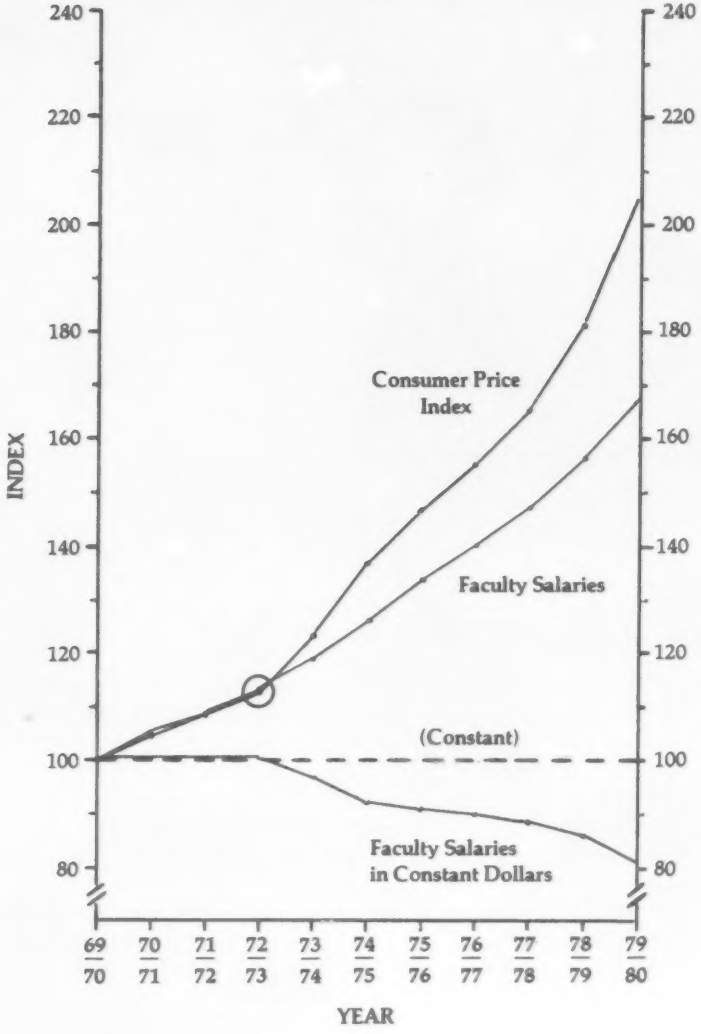
Several specific issues that will require attention so that creative and productive faculty are maintained follow:

First, faculty are demoralized. Limited financial rewards, restricted mobility, spartan professional support services (such as secretarial support and travel expenses), and restricted research and professional development opportunities all contribute to low morale. Although challenged to teach a student population that has changed markedly, some faculty may also feel underemployed, unappreciated, and lacking in direction.

Second, in the past decade the relative economic position of university and college faculty has fallen badly behind that of most other professional groups in the nation. Despite salary increases, for many faculty there has been an absolute decline in purchasing power. (See Figure 3.) Hard choices will soon have to be made. One possible choice is to reduce the total scale of higher educa-

Figure 3

Ten-Year Comparison of Faculty Salaries and Consumer Prices; Ten-Year Change in Constant Dollar Value of Faculty Salaries (1969-70 through 1979-80)



tion to the point that appropriate salaries can be given to remaining faculty. Another is to spend the resources necessary for maintaining a competitive position and to fulfill basic obligations to faculty, regardless of the financial demands from competing state programs. A third choice is to examine thoroughly the reward system for faculty, with special attention to incentives beyond salary compensation.

The faculties of Kentucky's universities are at the heart of a quality system of higher education. Kentucky must, therefore, provide compensation that encourages and rewards excellence and makes its universities competitive with those around the nation. At the same time, the universities and colleges must strive to ensure that faculty performance, with appropriate emphasis on teaching and public service as well as research, is fairly, thoroughly, and regularly evaluated and that professional development is encouraged.

Third, when faculty reward systems are considered, attention is often drawn to tenure. This Committee believes that the public perception of academic tenure needs clarification. Historically, tenure has helped provide faculty with protection from the vicissitudes of internal and external politics and the whimsy of management. Some persons now contend, however, that available legal remedies diminish the necessity for tenure as a protection for academic freedom. We affirm that the concept of academic tenure is an appropriate and necessary protection of academic freedom as well as a reward for superior performance.

In supporting tenure, we do not ignore contentions that the traditional tenure system may no longer be to the advantage of faculty or the educational system. A careful examination of the policies and procedures relating to the awarding of tenure is needed.

Because tenure is awarded by institutions of higher learning after careful evaluation, the effectiveness of this evaluation should be constantly examined. There is a common public perception that the principal, sometimes single, criterion for awarding tenure is research. Outstanding teaching and public service are often only secondary considerations. Depending on the mission of the university or college, teaching ability or service to the

public must be considered equal to research activity in the evaluation of faculty.

Although the concept of tenure is basically useful, in some cases the tenure system and the ways it is practiced may not encourage faculty performance that is most valuable to students, the community, or the institutions themselves. This Committee doubts, for example, that it is realistic to expect a faculty member to be truly outstanding in all areas: teaching, research, and public service. We wonder if tenure as currently managed inspires quality performance among faculty. We also are concerned that current tenure practices could have the effect of mortgaging society's intellectual future and making today's young scholars into a generation of academic gypsies.

We view tenure as a protection of academic freedom and as a recognition of professional achievement by the faculty member. But steps must be taken to ensure that productive research, teaching, and service continues after tenure has been awarded and that tenure does not lead to intellectual stagnation. Tenure is not meant to be protection from competitive challenge. Tenured faculty must be evaluated by means that are objective, organized, and penetrating.

Careful evaluation prior to the awarding of tenure and objective and penetrating evaluation of tenured faculty are only two means of insuring that faculty is creative and productive. The third means should be the reassignment or removal from their responsibilities of faculty who fail tests of evaluation after they have been awarded tenure. Leeway in the universities' financial compensation formulas to allow rewarding of outstanding performance among tenured faculty is equally important.

Fourth, concerns about tenure are linked to a broader need to assure quality in faculty performance and to the belief that faculty members must continue to develop and grow throughout their professional lives. The initiation and operation of effective programs for faculty development must be encouraged. Faculty evaluation, when properly done, is an important aspect of faculty development. Faculty evaluation should be systematic and conducted regularly for tenured as well as nontenured faculty. Favorable evaluations must lead to reward or recognition. Financial support for faculty salaries must be adequate to properly reward excellence.

Faculty are only one segment of the total work force of the universities. Indeed, almost 14,000 employees, or about 73 percent, are nonteaching staff and include maintenance, clerical, security, management, accounting, and hundreds of personnel in other job classifications. Limited financial resources and inflation have placed these employees in an extremely precarious position. Fair and competitive financial compensation for them must be a top priority for university administrators. However, balancing resources among faculty and other employees will be a demanding challenge.

Recommendations Regarding Faculty

FACULTY SALARIES

Faculty salary increases have fallen dangerously behind cost of living increases, and faculty have lost purchasing power. To increase the quality of faculty recruited and retained by the state's universities, faculty salaries must be improved. Kentucky's universities do not compete solely within the state or region for talented faculty; they also compete in national arenas and must do so effectively.

Recommendations

Kentucky's universities must strive to maintain faculty salaries at a level competitive with the national manpower pool in which they compete. To remain competitive, institutions may need to use greater latitude in establishing different compensation ranges for faculty in different disciplines.

If financial resources become more restricted, universities should consider the employment of part time faculty as an attractive alternative. This approach has strong advantages and disadvantages. When it is used, care should be taken to implement personnel policies (benefits and others) that protect these part time, or temporary employees. Rigorous

evaluation of the approach must be exercised so that academic quality is maintained.

MAINTENANCE OF FACULTY VITALITY

The encouragement of faculty vitality and creativity will be an especially challenging task, but will be all the more necessary in the future. This challenge results, in part, from the historic aspects of higher education: tenure and evaluation policies, restrictive specialization in academic disciplines, the training and socialization of faculty, financial trends, and others. The working environment for faculty is changing rapidly: They often teach less well prepared students or older students, and diminished financial support for salaries, scholarship and research is available. Still other conditions may result from changes in Kentucky's system of higher education, such as targeting more research resources toward a limited number of institutions or an increasing emphasis on service to the state and communities.

The encouragement of vitality and creativity among faculty requires approaches that must be implemented by the university boards of trustees and regents through their statutory responsibility for personnel. Departures from tradition will be needed to inspire excellence.

Recommendations

Budgetary incentives should be established for the support of faculty development programs and for rewarding creative university and college approaches to faculty job enrichment.

Alternatives to the traditional structure of academic work should be considered. More varied and stimulating work responsibilities must be encouraged. (Examples of such alternatives might include providing rewards for faculty to work outside the university to improve their teaching abilities and knowledge; emphasis on temporary or intensive specialization in research, teaching, public service, advising; and the use of sabbaticals for retraining.)

Academic departments should allow faculty members to concentrate all of their effort for a finite period on a partic-

ular facet of their work, such as teaching or work in the community, thus freeing their colleagues for concentration in other areas. Because enrollment in particular areas of study will decline, programs to encourage faculty to explore alternative career options through work in nonacademic settings, fellowships, and similar activities should be devised.

To encourage proper attention to outstanding teaching and to assist young teachers in developing their skills, universities should consider initiating "distinguished lecturer" and "distinguished teacher" programs. ("Distinguished teachers" might be given, with no other responsibilities, a one-year assignment to assist other faculty members with their teaching and to provide confidential evaluations and related assistance. A "distinguished lecturer" might be recognized for outstanding achievement as a scholar and be assigned for one year to provide lectures to the university and the community.) Universities should also consider encouraging the uses of faculty as experts or "internal consultants" on issues within the institution that require special expertise. Internal consultants might be given release time to develop expertise on issues such as academic program evaluation, collective bargaining, intercollegiate athletics, management or personnel strategies, affirmative action, and federal regulation.

EVALUATION AND TENURE

Tenure is a necessary means of protecting academic freedom and a necessary part of the academic reward system, yet several issues about the way tenure is used need continuous examination. There is a need to improve the effectiveness of evaluation for awarding tenure; a need to balance teaching and public service with research in evaluation processes; a need to avoid excluding younger scholars from the profession thereby creating a cadre of "academic gypsies"; a need to encourage continuing evaluation that is objective, organized, and penetrating after tenure is awarded; a need for effective ways to remove those tenured faculty who do not perform; and a need for professional growth and development.

Recommendations

Universities should be encouraged to create special committees on the "status of academic work, tenure, and the teaching profession" for the periodic review of evaluation procedures; to explore alternative work arrangements and reward systems; to monitor the impact of their evaluation and tenure system on faculty performance; to ensure that exceptional instructional, scholarly, and public service activities receive exceptional rewards; to see that faculty are supported in exploring new fields and in enriching their teaching and scholarly activities through leaves of absence and sabbaticals; and to implement policies for modifying or terminating work assignments if professional productivity does not meet expected standards.

Boards of regents or trustees should be encouraged to implement personnel policies that ensure that the potential productivity of younger scholars is not overlooked and that the future of the profession is not damaged as tenure decisions are made. Tenure policies should encourage and reward outstanding teaching and public service commensurate with those activities' status in an institution's mission.

RESEARCH, PUBLIC SERVICE, AND KENTUCKY'S FUTURE

Since their beginnings, Kentucky's universities and colleges have contributed to the well being of Kentucky and the nation through research and public service. **Research and public service are the institutions' means of providing knowledge and technical expertise directly to citizens, business and industry, and government.** These activities contribute to the quality of Kentucky higher education by aiding in the professional development of the faculty, by encouraging creativ-

ity, and by helping faculty keep abreast with developments in their fields. These activities also underpin the universities' commitment to the free exchange of ideas among people and to the continual review and analysis of conventional ideas and wisdom.

For purposes of this statement, "research" means activities that add to the deposit of human knowledge and that move forward the frontiers of knowledge. This is accomplished through "basic" research, through which new knowledge is developed, and "applied" research, through which existing knowledge is applied toward solving new or old problems.

However, the lab-coat-clad "researcher" bent over a Bunsen burner is but one aspect of a complex picture. The list of faculty research and creative efforts is almost endless. Within academic departments, as part of their daily responsibilities, artists paint and criticize the paintings of others, business professors conduct market research, economists devise federal monetary policy, sociologists identify new ways of organizing institutions, psychologists develop new therapies for emotional disorders, political scientists investigate voting patterns, and professors of English write literary criticism or novels. Universities are immense collections of highly trained people organizing, analyzing and adding to the store of human knowledge. In this context the line between "applied" and "basic" research is blurred. Flexibility spurs creativity and has provoked remarkably practical discoveries, such as those leading to the creation of the international microelectronics industry.

Public service includes a broad and varied range of expertise applied directly to the improvement of society's economic, intellectual, aesthetic, or informational needs. Among these are cooperative extension; the performing and creative arts; aid to small business, local government or schools; and direct service to businesses, unions, or community organizations. Public service provided by faculty might include, for example, advising local governments about tax systems; holding an office in a community or professional organization; delivering lectures to community groups, service clubs or school classes; consultation with state or federal agencies or with business; or preparing economic forecasts.

The allocation of time and effort by faculty to teaching, research and public service varies greatly, depending upon a university's mission and institutional policies. At some universities each faculty member, with the approval of the departmental chairperson and dean, de-

termines what specific portion of these three activities he or she will perform each year. In others, department chairpersons may make such decisions with less faculty involvement.

Consideration of research and public service begins with this Committee's agreement on five basic premises:

1. Research and public service are well established and immensely valuable functions of higher education institutions. Throughout their histories, colleges and universities have been responsible for the creation and transmission of new knowledge and understanding through three interdependent functions: teaching, research, and public service.

2. The desirability of research and public service activities at Kentucky's higher education institutions is not at issue. The challenge to the state is to determine how much and what kind will be done; where it will be done; and what the most appropriate allocation of public funds for its continuance should be. Some duplication of services and activities among institutions may be desirable, but planning and coordination are needed to avoid ineffective and unnecessary duplication or waste of finances and human resources.

3. Kentucky's universities are linked to a large and complex national research system. Research in them should benefit not only Kentuckians, but the nation. To be creative and effective researchers, faculty must participate with their peers in the larger national and international intellectual community. Some research, on the other hand, must have direct and explicit benefit to Kentucky. Institutions and their faculties should actively seek ways to relate the benefits of their research to their regions and state. They should not abandon other creative efforts, the benefits of which may not be of immediate or recognizable value.

4. Universities, like other major institutions in our society, are products of centuries of development. Over the last thirty years, thousands of administrators and faculty who were trained at the twenty-five or so most prestigious research universities have tried to replicate these prestigious research models at other universities all over the nation. Present conditions, however, require that aspirations toward research prestige and comprehensiveness at all universities be questioned. Such aspirations must be considered within the context of the

present conflict between the traditional aspirations of universities and present societal needs and resources. Substantial evidence suggests that limited financial resources for research and development, plus rapid inflation, will further concentrate the most outstanding research at a few existing stellar research universities and centers across the nation. For Kentucky higher education to achieve excellence in research, specialization will probably be necessary for universities not already in the top ranks.

5. Any consideration of research and public service in future years must reckon with a major concern of potentially crisis proportion that faces the United States: National studies and commissions make clear that America's historical preeminence in science and technology, and, therefore, its rate of productivity, is declining. Strong support for research and for its application to technological advances is necessary for reversing this trend.

Like the nation, Kentucky cannot hope for an expanding economy and healthy society unless scientific, technological, and humanistic knowledge is readily available. It is no accident that states with vibrant economies, such as Texas and California, also have some of the nation's outstanding research universities. Kentucky does not have an outstanding history of attracting financial resources for research and development from federal sources. A report by the Kentucky Legislative Research Commission and the Council on Higher Education (1979) stated: "In federal expenditures for research and development at universities and colleges, Kentucky ranks 51st nationally per capita. Expenditures (federal) per capita in Kentucky were $3.41 and nationally (per capita) they were $18.78." (Rankings include the District of Columbia.)

In the amount of federal funds received for research and development, an accepted measure of national research competitiveness, the University of Kentucky ranked 81st nationally in fiscal 1979 with $13.4 million in federal awards. This is approximately one-third of the amount received by the University of North Carolina at Chapel Hill. Available national rankings list only the top 100 universities; the University of Louisville, which was awarded $3.9 million in 1979, was unranked.

This Committee's attention is directed specifically to the following issues regarding research and public service in Kentucky:

First, cooperation between and among our universities and all levels of government and private business and industry needs to be increased. Kentucky's universities should examine innovative ways to share resources, projects, and problem solving with each other and with business and government.

Regarding government, the years ahead are likely to present a difficult condition: While taxpayers become increasingly resentful about government costs, their demands for improved services, and, thereby, the costs of government, are likely to increase. Government will need to enlist special expertise and knowledge to operate with increased efficiency and wisdom. Additionally, individual citizens, groups of citizens, and community organizations will be faced with highly technical public policy issues (such as those related to the development and use of nuclear power). Making informed decisions on these questions will go beyond the knowledge commonly available to most citizens.

Cooperation and cooperative sharing of research resources between and among universities and even between and among their own research and public service activities is limited. A division of labor and specialization by institutions is necessary and desirable and should be reconciled with the missions and service areas of each. Incentives should be provided to encourage such cooperation.

The quality and quantity of research, particularly in the "hard sciences," is highly dependent upon the quality and quantity of available equipment and facilities. The cost of scientific instruments in five basic science areas has increased fourfold since 1970, however, and American researchers believe that basic sciences in this country now suffer from inadequate and obsolete equipment and that continued deterioration is likely.

Making the expensive tools of research—scientific equipment, computers, and library resources—as available to as many scholars as is feasible should be of primary concern. Getting the most from limited research facilities and equipment in a creative and economical manner is desirable. Therefore, shared use of equipment among Kentucky universities and among their own academic units is necessary.

Second, the past relationship between state government and universities is marked only by haphazard and sporatic cooperation. This Committee believes that the economic development of Kentucky could be enhanced by a more systematic organization of university/state government relationships and cooperation and by increased public awareness of the expertise available on the state's campuses.

Related to the need for the direct application of university research is the fact that while many research and public service activities are listed in individual documents, there is no single inventory of these activities. As a result, it is difficult for government, business, industry and the public to analyze the nature of these activities, to use them, to measure their contributions, or to plan for their enhancement and, indirectly, their influence on the well being of the Commonwealth.

Third, there is a need for colleges and universities as collections of talent to directly apply that talent to the needs of their communities and the larger society. Kentucky and the nation will confront and address substantial social and economic issues in the years ahead. Through their public service roles, universities and colleges have contributed to many areas, such as elementary and secondary education, agricultural and industrial production, health care delivery, energy development, and understanding the environment.

Faculty should be encouraged to develop new ways of serving society through application of their expertise toward solving problems of government, school, business, and industry.

Fourth, the faculties at some Kentucky universities are more heavily engaged in research than are faculty at others because of institutional missions, administrative decisions, traditional faculty interests, recruitment policies, and financial resources. Faculty must keep up with changes in their fields if they are to teach well. For many faculty, some form of research provides the incentive and ordering framework necessary to maintain mastery of their areas of specialization. Others rely more on professional development avenues, such as attendance at professional meetings.

The extent to which Kentucky supports or encourages research varies, in part, upon the specific limits of institutional missions. The research pursuits of regional university faculties are often frustrated by inadequate support. And while traditional research is not a major expectation of community college faculty, research related to a community college's primary teaching mission is worthy of encouragement and recognition.

Fifth, the contributions made by universities through research and development are not well understood by the public. Most research is "experimental" in the sense that by definition the results cannot be known in advance. Some of the greatest benefits of research were serendipitous and unplanned, such as the discovery of penicillin. Without an understanding of the way research works, it is easy for the layman to ridicule studies as being arcane, esoteric, or self evident. Without an understanding of the ultimate potential of research, decision makers responsible for allocation of resources run the risk of throwing out the good with the bad. What is perceived as limited public commitment to research in Kentucky may result in part from the limited knowledge and understanding of the universities' research programs and contributions. This perception must be changed.

Sixth, the combined research of universities and of private business and industry could produce results greater than the individual activities. Numerous economic, attitudinal, and statutory barriers stand in the way of productive cooperation between business and industry and researchers in our universities. These barriers include tax and patent laws, personnel policies, traditional "town-gown" relationships, state funding practices, and attitudes. For Kentucky business, industry, and agriculture to compete successfully in the national sphere, these barriers must be removed and incentives for cooperation developed. At the same time, ways of encouraging financial support from the beneficiaries of research—especially research that directly improves the economic productivity of businesses or industries—must be explored.

Seventh, work toward a doctoral degree gives an individual education and training in sophisticated research and analysis for a profes-

sional life of scholarship and teaching. For such education and training to be effective, a highly skilled and research oriented faculty and adequate research programs are necessary. A good research program and faculty with well established research credentials are essential to good doctoral education. Doctoral programs are not starting points; they grow from nationally competitive research programs conducted by senior professors and other faculty. So they may emulate other universities or satisfy faculty interests, some universities have begun to offer doctoral education without these bases and without adequate long range planning.

The doctoral programs at the University of Kentucky and the University of Louisville must be of such quality that their students are as well prepared as those at major graduate institutions in other states. Program planning is necessary so that available financial resources for the research necessary to underpin quality doctoral programs are allocated and so that a determination of the proper relationship of Kentucky's doctoral programs to the needs of the state and nation is made. Kentucky must be careful to avoid training research scholars in its doctoral programs beyond the national need for them, if for no other reason than to prevent a disservice to graduates when they seek employment. (A more extensive discussion of doctoral level graduate education is in the subsection, "Academic Programs—Challenge and Opportunity.")

Eighth, the financial support most important for sponsored research usually comes from the federal government and private foundations. There is substantial evidence that those resources may fail to keep pace with future national research needs. In anticipation of this trend, Kentucky must explore its responsibility for supporting basic and applied research through resources within the state. This support consists of numerous components: well trained and experienced faculty, adequate libraries, sufficient professional travel funds, modern scientific equipment, support staff, and many others. State support for these services has diminished due to inflation and increased demands on state general fund revenues. For Kentucky universities to be truly productive and competitive, methods of maintaining or expanding the resources for scholarship, such as library holdings and equipment, must be found.

Ninth, the anticipated decline of financial resources for research from the federal level may lead to the conclusion that spending for research cannot be spread indefinitely across a large number of either state or national institutions. Productive research requires a critical mass of faculty, staff, and resources, including external funds. Current trends in scientific and technological research suggest that universities will have difficulties in keeping pace with their needs for facilities and equipment because of rapidly rising costs. While all research cannot be located in a few stellar national research centers, neither can every university in the United States expect to compete effectively in the national research arena. A recent report by the American Research Council states: "Both state and national interests are likely to be better served by fewer first-rate university research centers than by a larger number of institutions without adequate staff or funding."

Tenth, Kentucky does not yet contain any university that ranks in the top echelon of national research institutions. The challenge to Kentucky is to determine how research responsibilities and supporting resources should be allocated most effectively and to monitor their effectiveness in meeting the changing needs of the state and nation for sophisticated research. The mission statements for Kentucky's universities approved by the Council on Higher Education in 1977 identify the differentiated research functions to be carried out at the institutions. The University of Kentucky is expected to serve "as the principal institution for statewide instruction, research, and service programs in all fields without geographic limitation." The University of Louisville is expected to "meet the educational, research, and service needs of its metropolitan area. . . ." The University of Louisville "shares with the University of Kentucky a statewide mission in medicine, dentistry, law, and urban affairs." Each regional institution "should provide applied research, service . . . directly related to the needs of its primary service region."

This Committee believes, however, that there is still some doubt about the extent to which each university should pursue research, leaving open the option for all institutions to become increasingly involved in research.

Our recommendations lead us to a very sensitive area, one which can be easily misunderstood. We believe that Kentucky needs to seek quality in research and that the recent tendency of universities to strive for comprehensiveness has sometimes confused "aspiring to quantity" with "aspiring to quality." **To achieve quality in research efforts, each university need not seek comprehensiveness but instead should cooperate within an organized system that meets the needs of the state as a whole.** Specialization is more conducive to the effective channelling of resources. Universities and their faculty should not confuse our desire to limit "comprehensiveness" and to encourage specialized excellence with a desire to limit quality.

Recommendations Regarding Research At the University of Kentucky And the University of Louisville

Two universities, the University of Kentucky and the University of Louisville, are expected to maintain extensive research activity, each within its established mission statements: one mission is comprehensive, the other is focused. Both universities are expected to pursue quality in their research endeavors.

Recommendations

Kentucky should encourage the University of Kentucky, as its comprehensive research university, to achieve national prominence in research and contribute to the state and nation by advancing the frontiers of knowledge. The University of Kentucky's role as the state's comprehensive research university should be reaffirmed, and appropriate state resources should be provided to support this role.

The University of Kentucky's designation as a comprehensive research university carries with it the obligation for the institution to develop research and related programs of national stature that also serve Kentucky. The University of Kentucky also has the obligation to disseminate to the cit-

izens and to other universities in the state the results of its basic and applied research. Extensive cooperation between the institution and other universities is essential for an effective system and prosperous state.

The University of Kentucky shall be encouraged to seek increases in funding and to allocate a substantial amount of its general fund budget for research. The University of Kentucky shall also seek external financial support for basic and applied research through contracts and grants. Adequate financial support should result in research, as judged by well established and traditional scholarly standards, that is of high quality.

The University of Louisville is Kentucky's principal urban institution with a major health sciences complex. This urban institution should be encouraged to aspire to excellence in research and tc contribute to the state and nation in advancing knowledge. The University of Louisville should be encouraged to seek additional state and external funds to support research that is consistent with its focused mission.

The University of Louisville can be most productive in its service to Kentucky if its research is focused on its metropolitan area and on those areas in which it shares a statewide mission with the University of Kentucky: medicine, dentistry, law, and urban affairs. Without implying that there should be a reduction in the institution's commitment to quality, this Committee believes the University of Louisville should not expect or aspire to become a comprehensive research university.

The mission statements approved by the Council on Higher Education refer to the University of Louisville "sharing with the University of Kentucky a statewide mission in urban affairs." The terms, "urban mission" and "urban institution," have their origin in the mission statements' reference to "urban affairs." Over the years these terms have been defined and interpreted in a variety of ways. Frequently the different definitions have been in conflict with one another. Kentucky is not well served by this lack of clarity. The Council, in cooperation with the universities, should adopt explicit defini-

tions for the terms, "urban affairs," "urban mission," and "urban institution," for the purpose of supporting the development of the state system of higher education.

Recommendations Regarding Research at the Regional Universities And Kentucky State University

The research and instructional programs of all universities are intertwined. Instruction involves the communication of knowledge to successive generations of students. Research involves the creation, dissemination, and application of knowledge. Research and teaching are thereby mutually supportive of one another; each is stimulated and strengthened by the other.

To varying degrees of sophistication and cost, all university faculty should engage in research and scholarly activities so that students will benefit from their improved knowledge. They should be adequately supported in their endeavors. On the other hand, the Commonwealth cannot and should not support eight comprehensive research universities. The challenge, then, is to determine the appropriate scope of research activities at the various institutions to be supported by state funds distributed through the budgetary process.

Recommendations

The regional universities and Kentucky State University should allocate limited portions of their state funds to research that is in accord with their missions and instructional needs. These institutions, however, will need to focus their primary attention on other means of faculty development and enrichment other than that gained through expensive research projects.

Outside financial support, such as contracts or federal grants, should be sought when it does not commit the institution or the state to new state supported expenditures or

long term upkeep of equipment, staff, or facilities for research purposes.

Universities should ensure that support for faculty research, such as travel to professional meetings, secretarial assistance, supplies, and photocopying is provided in their institutional budgets.

The institutions, through the coordination of the Council on Higher Education, should establish, as a cooperative effort, a program of faculty exchange among public and private colleges and universities, state government, and private business and industry. Special attention should be given to making the research facilities of the University of Kentucky and the University of Louisville available for the enrichment of faculty at other institutions in the state.

Recommendations Regarding Cooperation in Research

Cooperation among and within Kentucky universities in their research efforts is necessary and must be encouraged. Certain types of equipment and resources can be efficiently used in centralized facilities, although specialized staffing may be required. While there are dangers in having many users of complex equipment, skilled management and trained operators could serve multiple users. Pride of ownership will have to give way to more critical needs. When equipment is shared, the costs to operate and maintain it must be shared among the users.

Improving the quality of research will require that some individual institutions make sacrifices so greater good is achieved. The public is not served well by the unnecessary duplication of research activities at all public universities. Cooperation among institutions, aided by incentives in the state's formula for funding higher education, is imperative. Institutional specialization in research that requires substantial outlays for equipment and facilities should be required by the Council on Higher Education.

Recommendations

Institutions should make expensive and sophisticated research equipment available to researchers and colleagues throughout their own campuses and at other public and private institutions of higher learning in Kentucky. For such sharing to be effective, an inventory of research equipment that points out special instrumentation, characteristics, and usage will be required. Such an inventory should also include equipment at research facilities other than universities that is available for common use. The purchase of new equipment to be shared by more than one institution should be given the highest priority by the Kentucky Department of Finance.

Steps should be taken to catalog the holdings of all university and private college libraries on a statewide basis and to develop a way for sharing materials rapidly and securely among libraries. Special provisions and financing will need to be made for transportation costs and computer assistance to accomplish this objective.

The Council on Higher Education should examine the relationship of existing research centers and institutes to university missions. As this examination is undertaken, special attention must be given to protecting the institutions' freedom of inquiry from improper intrusion by outside forces.

To enhance the quality of departmental research by faculty at all universities, research fellowships should be established whereby faculty might work with equipment and staff at the University of Kentucky and, as appropriate, other universities.

Recommendations Regarding Public Service

Public service is a faculty activity through which higher education traditionally has served society. Faculty expertise can be focused on

emerging areas of need in Kentucky such as education, energy and the environment, and economic development. Faculty, particularly those at the regional universities and the community colleges, are uniquely qualified to assist in meeting local needs. Exemplary public service provided by faculty members is important in its own right and contributes to Kentucky's health and growth just as exemplary research makes its contributions. It is important that encouragement be given to the involvement of university faculty and staff in providing service to the public, public institutions, the schools, and other elements of society.

Recommendations

Special incentives should be provided in the budgetary process to encourage faculty involvement in innovative and extensive public service activities, particularly those that focus on the emerging needs of the Commonwealth and of local communities.

Universities and colleges must ensure that evaluation of faculty, such as tenure and merit reviews, adequately takes public service activities into account. In addition, restrictions on external work activities by faculty should be reviewed to ensure that attention is given to the public's need for higher education based expertise.

Kentucky's universities and colleges should inform the state's citizens of faculty expertise and promote the use of these resources.

The financing of faculty public service is not always the responsibility of the taxpayers. Where faculty expertise provides a valuable service, but to an extremely limited audience, or where the majority of the benefits is enjoyed by the immediate recipients of the services, it is appropriate that the recipients underwrite the costs of service.

The Council on Higher Education should establish a special research and development committee comprised of repre-

sentatives of universities, state and local government, private business and industry, and consumers. In order that the state would attain maximum benefits from the research and service available through Kentucky's universities, the special research and development committee should devise strategies for the following:

- Assessing the emerging needs for research in the Commonwealth and bringing those needs to the attention of universities and their faculties and other research personnel;
- Developing and maintaining an inventory of the existing research at Kentucky's universities and disseminating this inventory;
- Monitoring state government's use of contracted research to ensure that researchers or research capacity located within Kentucky is used (or contracted for) whenever possible;
- Creating an independent, not-for-profit public corporation that would encourage the application of university research and public service capacity to the needs of citizens, community groups, local governments, and schools and to the complex emerging social and technological issues of the future;
- Establishing a "senior corps of retired researchers" to serve as research personnel on temporary and part time bases at low cost to all sectors within Kentucky;
- Monitoring the Kentucky Economic Development Cabinet's needs for sophisticated research and ensuring that businesses and industries being encouraged to locate in Kentucky are aware of and supportive of the research capabilities available in the state;
- Assisting in the efforts by Kentucky's universities to attract financial support for research projects from federal and other national sources;
- Encouraging financial support for research related to the economic development of Kentucky from private

businesses and industry; (For purposes primarily related to economic development, funds should be made available to support research and development activities within the Commonwealth, and the creation of a Center for Science and Technology should be examined.)

- Disseminating to the general public information on research and public service activities at all the state's academic institutions;
- Establishing a "research fellows" program so that faculty without access to research equipment or to colleagues with special expertise may benefit from the resources of private business, the University of Kentucky, and other universities, as appropriate; and
- Through a special panel representing private business and industry, increasing cooperation and collaboration in research activities between private industry and universities. (Barriers to such cooperation, such as tax codes or university personnel policies, should be given special scrutiny to see how they might be eliminated.)

MANAGING OUR RESOURCES

The fundamental concern of the Prichard Committee on Higher Education in Kentucky's Future is for the quality and health of Kentucky's system of higher education. The citizens of Kentucky have a university and college system with an annual budget from all sources of approximately $650 million. The system's $320 million in state appropriations in 1980-81 are approximately 17 percent of the state general fund revenue. The system was developed over the past century, but its primary development occurred between 1950 and 1970 when Kentucky's citizens and state officials asked for expanded higher education for a "baby boom" generation. Their interest was buttressed by a faith in knowledge and expertise as solutions to national problems.

The public in 1980 has a different perspective. Discussions concerning public services take place in the context of "scarcity," "inflation,"

"diminished productivity," "malaise," "accountability," "retrenchment," and "tax cuts"—the themes of recession and inflation. But if our aim is to look to the future, we must not be overwhelmed by the present. Since we do not have precise ways of knowing with certainty what the future holds, we must ask what the public wants and expects in the future and what can be done to shape events within the boundaries of reasonable possibilities.

We begin with the premise that higher education is an essential public service institution, a pillar of modern society that bears a major share of the responsibility and credit for society's well being. As other service institutions and industries, higher education is paid for from the surplus of economic productivity. And as other service institutions, it can easily be attacked as inefficient in its operation.

The state must learn to manage service institutions for performance. Higher education is not a business, and it produces no tangible products. Its purposes must usually be stated as intangible services to the society. A clear definition of the mission of the higher education system in Kentucky—a statement of the intangible services to be provided by it to society—will result in a determination of goals and objectives for the system, which in turn will result in the establishment of priorities, definitions of the measurements of performance, and ways through which the Council on Higher Education can monitor the performance of both the system and the individual institutions that comprise it.

Higher education must be organized in a fashion that permits the auditing and evaluation of objectives and intangible results. **Until a clearly defined system of higher education exists in Kentucky, it will be impossible for the Council to evaluate the performance of the institutions and to assess the relative benefits received by the state from tax dollars invested in comparison to the benefits received through other state supported programs.**

The system must have defined parts, each with its different and agreed upon function. There must be commitment to the different purposes and functions agreed upon by the Council and the university boards of trustees and regents. The system must be both efficiently managed and effective in delivering its intangible services. It must be monitored and subjected to rigorous performance evaluation by the Council for the Commonwealth.

In 1977 the Council adopted a statement that defined the type of higher education system needed in Kentucky. Included in the statement was the following:

. . . Kentucky should develop a system of higher education designed to meet the educational needs of the Commonwealth as a whole. The potential benefits of a system cannot be realized with the institutions attempting to meet those needs independently.

. . . Because of Kentucky's geography, population distribution, historical development, and the differing needs of its several regions, eight public universities and thirteen community colleges have developed. A "system of higher education" must recognize that the development and strengths of these institutions is an integral part of any plan for the development of higher education. Likewise, the system must encourage diverse programs to fulfill the wide-ranging needs of Kentucky, yet not at the cost of undesirable duplication. Each institution should contribute to a "system of higher education" in accordance with a specific mission and through selected and unique capabilities. This should not be construed as modifying or affecting the autonomy, authority, or independence of the boards in their operation of the individual institutions.

. . . There are, therefore, two basic issues involved in developing a system of higher education in Kentucky: determination of the optimum mission of each component institution and determination of the most efficient and effective distribution of programs.

Turning first to the question of missions, what is needed is a system which would permit differentiation of function in the various institutions so that the institutions could collectively meet the needs for higher education.

An understanding by Kentucky's citizens of what can reasonably be expected of the state's higher education system and public evaluation of the system's performance should create greater awareness and involvement of the citizenry in higher education. **If increased resources are made available to improve higher education, the people must know that there will be rigorous planning, efficient management, and performance evaluation by state officials. Furthermore, the establishment of priorities should provide a clear framework for the allocation of resources within the higher education system.**

The Budget Process

Budgeting for public higher education is a complex, but orderly, process that involves individuals on each campus as well as in state government. The process used to determine state funding levels for

universities has the potential of being more useful than it has been in determining and evaluating the performance of the institutions and in encouraging creativity and autonomy. The need for an understandable and manageable process to use in budget construction is obvious.

Several states, including Kentucky, have adopted the concept of "formula funding" for use in determining the level of appropriations requested for higher education institutions. In Kentucky, however, levels of funding indicated through the formula concept have never been appropriated. Also, the formula concept has not been applied to the distribution of appropriations at the institutions. For the past several years, Kentucky has actually operated with "incremental budgeting" or "continuation funding."

"Formula funding" is a procedure that uses quantitative variable factors, such as student credit hours and assignable square feet, and selected quantitative fixed factors, such as student/faculty ratios and maintenance cost per square foot, to determine needed institutional funding. Formula funding can be structured to account for academic levels of instruction, e.g., undergraduate, graduate, and professional; instructional disciplines by category; various programs and subprograms, e.g., instruction, libraries, and physical plant; and variations in institutional sizes, locations, roles, and programs.

The use of formula funding to determine levels of state support of higher education can further the achievement of two principal objectives: equity in the distribution of state support among Kentucky's public higher education institutions and adequacy of support needed by each institution to fulfill its role and mission. As a systematic and objective technique, formula funding allows public authority to exercise greater financial control and allows higher education to protect its academic freedom from encroachment that might occur through the budgetary process.

The Kentucky formula is "activity" or "program" driven and, hence, avoids the deficiencies of "enrollment" driven models. By using accepted "norms," formula funding accomplishes "zero-based budgeting" in an administratively practical manner. In broad terms, the formula provides for common funding of common activities; recognizes variations in institutional roles and missions, academic levels and programs, and size; and envisions continued use of benchmark institutions as points of reference.

Nationally, formula funding was developed in a period of growth and relative autonomy for universities. As states proudly built univer-

sities in the 1950's and 1960's, these state formula funds, which increased as enrollments increased, were used in much the same ways as private universities used endowment income. However, with the end of rapid campus growth in the 1970's, these formulas were easily transformed into the tools state management and budget divisions could use for evaluating and ensuring "accountability" when performance in relation to institutional missions should have been the critical factor.

Generally, many funding formulas around the nation were not devised to take into account marginal costs. During expansion the marginal cost to institutions of each additional student decreased. Formulas were popular because excess income generated by each student could be used for program development and renewal. But when enrollment decreases or growth slows, marginal costs to the institutions do not go down as quickly as does the amount of revenue produced by the formula they receive to cover those costs. Today, as universities built in the 1950's and 1960's begin to face deferred costs such as the deterioration of buildings (called "depreciation" in the private sector), the formula approach can severely retard efforts to achieve excellence. So far, this pitfall has been avoided in the Kentucky formula, which is not based primarily on enrollment, but constant evaluation of the formula is nonetheless necessary.

Special Grants and Contracts

The need for many educational programs and public service activities, especially in periods of substantial societal change, may arise on short notice and may be of limited duration. Kentucky's universities and colleges must be able to respond quickly with programs that can be reduced or eliminated once the immediate need has been met. Sometimes existing faculty and staff can be assigned temporarily to undertake applied research and to work with concerned citizens or businesses. Instructional programs present a more difficult problem, since they require longer periods for planning, approval, and the hiring of staff, and once established, instructional programs tend to become permanent.

To meet needs, the Commonwealth of Kentucky should be authorized to award grants or to enter into contracts of limited duration with a wide variety of educational institutions and organizations, including private and independent colleges and universities.

Noneducational Costs

A number of the costs attributed to higher education do not fall within the areas of teaching, research, or public service, the three basic functions of universities. These costs include such items as unreimbursed indigent care costs at the universities' hospitals and entertainment in the form of intercollegiate athletics. Basic questions about the relative priority of programs and services in colleges and universities arise when such costs are considered.

For example, in 1979-80 institutional general funds in excess of $4 million were devoted to intercollegiate athletics in Kentucky's system of public higher education. Some argue that because the amount is less than 2 percent of the total general fund appropriation to higher education (although intercollegiate athletics expenditures reach approximately 7 percent of the appropriation at one institution), it is not a significant expenditure. **Others note that any expenditure of state resources for intercollegiate athletics is excessive and unacceptable in a time of financial difficulty and must be viewed in light of the need to allocate resources to increase or maintain quality of education.**

Another activity of severe financial magnitude is the operation and management of the hospitals within Kentucky's two academic health science centers. **This Committee is concerned that nonreimbursed indigent care costs continue to distort the financial picture of the two hospitals.**

The primary purpose of the two medical center hospitals is to support the instructional and research programs of the health science academic disciplines. We recognize that some unreimbursed costs of expenses at the universities' hospitals are appropriate and, as such, should be provided for through the higher education appropriations. But the presence of teaching hospitals should not remove the financial obligations state and local governments have to provide needed health care for citizens who are unable to pay for such service. We urge state government and other governmental entities to meet their obligation of ensuring care for indigents with appropriate funding through those agencies that have primary responsibilities for health care of needy individuals, rather than through higher education. **Although providing some level of indigent care is not a direct responsibility of higher education, this Committee finds no fault with Kentucky's teaching hospitals doing so. However, it is essential that indigent care costs not consume higher education appropriations beyond the amount neces-**

sary to support the instructional programs. Additionally, the volume of indigent patients should not compromise the effectiveness of the instructional and research programs of the two health science centers.

Tuition Policy

Expenditures for public higher education in Kentucky are an investment in the future of the state and should be shared in an equitable manner by the students and the state. Tuition is the students' share of that investment.

The appropriate method for setting tuition at Kentucky's universities needs a thorough examination. The determination of tuition levels raises basic questions concerning equity, levels of services, and public/private sector competition. Specifically, what portion of the actual costs of higher education should be borne by students in the form of tuition, and how would any changes affect access to higher education for the citizens of Kentucky?

Kentucky and many other states traditionally have embraced the philosophy that low tuition is one of the best forms of student financial aid. However, this form of "aid" is not related to students' financial status. All Kentucky undergraduate students, regardless of personal financial conditions, benefit from low tuition. Nonetheless, it is imperative that undergraduate tuition policies be firmly linked to higher education financial aid policies. This Committee considers it unacceptable for any Kentuckian capable of pursuing an undergraduate education to be denied the opportunity to do so solely because of inability to pay.

The Council on Higher Education has the statutory authority and responsibility to establish the tuition schedules for public higher education in Kentucky. For several years the Council has used the "institutional benchmark" concept for determining undergraduate tuitions. The benchmark approach places Kentucky tuition policy in a position of substantial dependence upon the tuition schedules established for institutions in other states. "Benchmarking" presents a "moving target" for tuition scheduling in Kentucky, thus compromising the financial planning efforts of students, their families, and the educational institutions.

The determination of tuition policy for graduate and professional education is different from that for undergraduate tuition. The use of

"benchmarks" for setting graduate and professional school tuitions is especially difficult. They should be higher than undergraduate tuition within the same institution.

While a few states have adopted policies (accompanied by loan and service payback opportunities) that set professional education tuition at the "full cost" of instruction, such an approach is impractical and not in the best interest of the student or the state. On the other hand, there is merit in a policy that results in tuition for professional education being based upon a percentage of the state support for such instruction.

Tuition at two-year institutions should be the lowest of all tuitions within the state system because the costs of operating a two-year institution are lower than those of operating a four-year institution with some graduate programs. (Because this Committee is concerned with the operational costs of the entire institution, not the costs of specific associate degree programs, we feel that associate degree program tuitions at a university campus should be the same as other undergraduate tuitions at that institution.)

Student Financial Aid

For more than two decades Americans have recognized the individual and social benefits that result from reducing or eliminating financial barriers to higher education and have supported the expenditure of federal and state tax revenues for doing so. The use of tax revenues for student financial aid is an investment, not an expenditure. While these investments have benefits for the individual, they offer even more benefit to the state and the nation.

For many Kentuckians, student financial aid is an absolute necessity for their pursuit of an undergraduate education. **For a qualified Kentuckian to be denied an undergraduate education solely because of an inability to pay is unacceptable. The provision of "need-based" financial assistance programs for Kentuckians attending both public and private Kentucky colleges and universities is desirable.**

Student resources have been affected negatively during the past two years. Federal and state budget cuts, "Proposition 13" sentiment, revenue shortfalls, high unemployment, continued inflation, and increasing demands on tax revenues for other essential public services have impinged upon student financial aid resources in confusing, con-

flicting and sometimes unrecognized ways. The costs of college attendance have continued to rise, and the gap between costs and resources with which to pay has widened. Increasing educational costs and declining federal provisions place added responsibility upon family resources and state programs. The Education Amendments of 1980 and the more recent federal budget reductions have resulted in additional demands on family or individual resources.

At a time when the federal government appears to be moving away from providing student financial aid, the Commonwealth of Kentucky may need to step in to fill the void. There is no question that the state should pay because it will, in fact, pay in one form or another. The choice for the Commonwealth will be to "invest" state money now in the form of student financial aid or to spend state funds later in the form of unemployment compensation and lost wages. The latter is a certain outcome if hundreds or thousands of students, unable to attend colleges, attempt to enter an already depressed employment market. Although changing demographics may alter the employability of young people five years from now, the present situation demands that state government recognize and act upon the obvious advantages of investing in student financial aid, rather than using scarce resources for unemployment compensation and other social payments.

The Kentucky Higher Education Assistance Authority (KHEAA) was established by the Legislature to promote, develop, and provide financial assistance programs and related services to reduce economic barriers to higher education. The KHEAA administers a comprehensive student assistance program that includes four primary subprograms:

- The State Student Incentive Grant Program provides federal and state funds, matched on a one-to-one ratio, in the form of grants to Kentucky residents with established extreme financial need, thereby enabling such students to defray the cost of attending postsecondary educational institutions within Kentucky.

- The Kentucky Tuition Grant Program, funded entirely by Kentucky's general fund, provides tuition assistance to Kentucky residents with established financial need who are enrolled in KTGP eligible private institutions within the state.

- The Guaranteed Student Loan Program insures low interest loans made by private participating lenders to Kentucky residents so they may attend postsecondary educational institutions within and outside Kentucky, and to nonresidents to enable them to attend postsecondary institutions within Kentucky. Through the Kentucky Higher Education Student Loan Corporation, a secondary market is funded for making student loans available from private lenders and for assuring the availability of capital for low interest guaranteed student loans.

- The Commonwealth Work-Study Program provides federal and state funds, matched on a four-to-one federal to state fund ratio, to Kentucky residents with financial need in the form of wages for summer and school year employment at colleges and universities and other public or private nonprofit organizations.

The substantial reductions in student financial aid funding being proposed at the federal level would severely affect the ability of many students to finance college and university expenses. According to a recent study by the National Center for Education Statistics, 73 percent of all 1980-81 high school seniors planning to enroll in college were depending upon the availability of some financial aid from federal, state, or institutional sources. A recent study by the National Institute of Independent Colleges and Universities shows that 60 percent of undergraduates attending private colleges and universities receive some form of financial aid.

The implications of reduced resources, rising educational costs, and increasing student dependence upon some form of student financial aid intensify concern about the widening gap between costs and resources. The Reagan administration's reductions in federal funding are expected to have an impact on Kentucky college and university enrollments. Kentucky campus financial aid administrators estimate that the loss of enrollment could reach or exceed 25 percent of current Kentucky undergraduates.

Grant funds have never been sufficient to meet the needs of all financially needy student applicants. In 1980-81, approximately 4,500 applicants qualified for funds, but after all funds were committed, there was a shortage of approximately $2.0 million. Through June, 1981, about 3,800 students had been denied aid for the 1981-82 academic year because of a shortage of $1.5 million.

Within this framework the state programs become more significant. **To ensure that academically qualified Kentuckians have access and choice in pursuing postsecondary education in Kentucky through student aid programs, the Commonwealth must increase the resources it provides for such programs.**

Effective Management of Resources

In the management of higher education, the highly effective use of public resources will be demanded in the future. Because of this necessity, the Council on Higher Education has contracted with Price Waterhouse and Company in association with MGT of America, Inc. to conduct a study of the management of Kentucky public higher education. The study is to be completed in February, 1982. The results should be carefully scrutinized, and those items with potential for improving management should be implemented.

To some degree, however, higher education's needs go beyond those for efficiency. A recent study for the Carnegie Commission explained that aging faculty and campus buildings are factors to be considered in determining higher education's needs:

> The factor is age—that of faculty and facilities. Older faculty cost more. They expect and get higher pay, and they may need more academic support services as well. Older buildings and laboratory equipment are expensive in a different sense: theirs is the cost of obsolescence or inappropriateness to the creative potential of students and faculty. . . . The costs of the aging of those investments will be immense, and the charge on institution's current discretionary resources, whether through replacement or supplementation of older investments, will be more than can in any obvious way be sustained.

During the 1970's, many of the management functions of public universities, such as purchasing, accounting, and construction, were assumed by state governments for the purpose of ensuring "accountability" and control. Thus, universities became twice accountable, once internally and once externally, for many management functions. The efficiency and effectiveness of this doubling of management control must be examined.

Recommendations Regarding Higher Education Finance

THE BUDGETARY PROCESS

The use of "formula funding" to determine levels of state support of higher education can further the achievement of equity in the distribution of state support among Kentucky's higher education institutions and adequacy of state support of each institution in the higher education system. As a systematic and objective technique, formula funding serves the public's need for effective financial control of higher education and higher education's need to protect its academic freedom from encroachment that might occur through the budgetary process. The Kentucky formula is based more on "activities" or "programs" than on "enrollment." In broad terms, the formula provides for common funding of common activities; recognizes variations in institutional roles and missions, academic levels and programs, and size; and allows in some cases continued use of benchmark institutions as points of reference.

However, the need for many educational programs and public service activities, especially in periods of substantial change, may arise on short notice and be of limited duration. Kentucky's universities and colleges must be able to respond quickly with programs that can be dismantled or eliminated when the immediate need has been met. The Commonwealth of Kentucky needs to award grants or enter into contracts of limited duration with numerous educational institutions and organizations, including private and independent colleges and universities.

Recommendations

The Council on Higher Education should continue to embrace and support the concept of formula funding as a basis for the distribution of state general fund support to Kentucky's public higher education institutions.

The Commonwealth of Kentucky should establish the goal of 100 percent funding of the formula. The Council should

continually evaluate the adequacy of the formula and adjust the various elements as necessary to accommodate changing conditions, such as funding decreases.

The Council should more effectively synchronize budget review activities with academic program review activities, including the review of both existing programs and new program proposals.

The Council should adopt procedures whereby the Commonwealth may award grants or enter into contracts for special educational, research, or public service activities that are of limited duration to meet immediate local, regional, or state needs. These procedures should allow such arrangements to be made with Kentucky's independent colleges and universities.

GENERAL FUND APPROPRIATIONS FOR INTERCOLLEGIATE ATHLETICS

Intercollegiate athletics are not inherently inappropriate activities for universities, and such programs often are sources of pride and entertainment for students and alumni. However, the central activities of higher education are entitled to make a greater demand on state general funds than are intercollegiate athletics. Higher education in the future must increase the quality of educational programs and scholarship, which in turn stimulates the quality of life for all Kentuckians. Instruction and scholarship are the central purposes of higher education, and all other campus activities and programs, even if important, must be viewed as secondary.

Recommendation

The use of institutional general funds for intercollegiate athletics should be phased out over a four-year period. Programs mandated by federal law should be temporarily exempt from this requirement. The elimination of state general fund support for intercollegiate athletics should not be

viewed as reducing higher education's total financial need, but rather as a reallocation of appropriations to other higher education needs. Universities with intercollegiate athletic programs that are self supporting and/or supported by sources other than general fund appropriations should be encouraged to maintain these programs.

APPROPRIATIONS FOR UNIVERSITY TEACHING HOSPITALS

The primary purpose of Kentucky's two medical center hospitals is the support of the instructional and research programs of health science disciplines.

Recommendations

Payment for indigent patient care should come from some source other than the higher education budget. Unreimbursed costs for indigent patient care should not be a financial burden for higher education. Other governmental entities should meet their obligations in this regard.

The two teaching hospitals should intensify their efforts to collect fees from patients and third-party payors.

PUBLIC TUITION POLICIES

The benchmark approach makes the determination of Kentucky tuition rates overly dependent upon tuition schedules established for institutions in other states. "Benchmarking" presents a "moving target" for tuition scheduling in Kentucky and compromises the financial planning efforts of students, their families, and the educational institutions.

Recommendations

The Council on Higher Education should establish an alternative to the use of benchmarks in determining tuition. This alternative should be based upon a combination of the following factors:

- The relationship of tuition to the financial needs of the instructional programs in higher education;
- The relationship of tuition to the financial well being of the citizens of Kentucky, for example, Kentucky personal income; (Such a policy might relate undergraduate resident tuition to per capital income as a percentage; graduate and professional resident tuition would be a percentage of the undergraduate rate; and nonresident tuition would be a percentage of resident tuition.) and
- The relationship of tuition to the student's share of the investment in higher education to the portion the state is willing or able to provide. (Students should not pay an ever increasing share of the cost of public higher education. As per capita income increases, undergraduate tuition rates would increase accordingly, but they should not increase in an amount disproportionate to the increase in state appropriations for higher education.)

Tuition policies must be linked to higher education financial aid policies. The Council and the institutions should make certain that no educationally qualified Kentuckian is denied an undergraduate education solely because of inability to pay.

STUDENT FINANCIAL AID

Because an educated population is of value to the nation and to Kentucky, the public has been commited for more than two decades to the principle that financial need should not bar a qualified student

from attending a public or private college or university. Federally supported programs have provided the major share of assistance to financially needy students in Kentucky; but since 1972 the Commonwealth has taken on increasing responsibility. Despite Kentucky's commitment of funds, they have never been sufficient to provide the total amount of grants or loans for which students were eligible. Recent reductions in federal financial aid probably will further reduce the availability of financial aid and increase the pressure on state resources. Such reductions may mean that thousands of Kentucky students eligible for aid will not be able to attend college.

Recommendations

The Council on Higher Education should request that the legislature, through the state executive budget, increase the funds available for student financial aid under the administration of the Kentucky Higher Education Assistance Authority (KHEAA) State Grant Programs.

The Commonwealth should reaffirm its commitment to diversity in higher education by increasing the financial aid available to students in both public and private higher education.

The legislature should be asked to increase significantly or remove the debt ceiling for the Kentucky Higher Education Student Loan Corporation.

The KHEAA, in cooperation with the Council, should conduct a thorough study of the impact of student financial aid on the educational, financial, and cultural enrichment of Kentucky. The KHEAA should expend available funds for the study. Special attention should be given to the impact of severe federal reductions in student aid funding upon Kentucky's objectives for higher education.

The KHEAA, in cooperation with the Council, should identify any barriers that unfairly restrict student financial aid to adult learners and should recommend ways of eliminating those barriers.

THE FINANCIAL CONDITION OF HIGHER EDUCATION

Kentucky's financial support for higher education has been declining for ten years. In real terms, the 1980-81 appropriations for the six public universities that existed in 1970 fell to only 86.6 percent of those in 1971-72—a net loss of 13.4 percent. This figure does not include funds for enrollment increases or for the University of Louisville and Northern Kentucky University, which were added to the system after 1970. **While the addition of two universities was needed to provide additional access to higher education for Kentuckians, adequate financial support never followed the commitment. If this trend continues, Kentucky's system of higher education is headed for a crisis.**

To understand the extent to which support for Kentucky higher education has declined, even though institutions have been added and many more students are now served, and to realize what must be done, it is useful to look at recent trends in sister states. Even before World War II, the states of the Old South sought to pull themselves out of the backward economic condition that had lingered since the Civil War. By the 1960's all of the southern states that are now members of the Southern Regional Education Board (SREB) had committed firmly to the improvement of education as the way out of economic stagnation. North Carolina's Governor Terry Sanford exemplified those who led the way to a New South. In 1961, Sanford raised the banner of education:

> To the extent that education is basic to the achievement of our national goals, and nothing is more basic to it, education must be the foundation of progress in the South.
>
> North Carolina has settled the question. It does not intend to turn back. We have faced the bleak alternatives to better schools, and we have chosen to expand and improve our schools.
>
> The hour is at hand when South Carolina, North Carolina, and all the South can rise again and march again. We'll make this march not with bayonets but with textbooks. We will not be firing on Fort Sumter. We will firing on the dungeons of ignorance.

> At the head of our educational system and carrying the heaviest responsibility for its leadership are our colleges and universities. These institutions serve as the brain centers, as sources of ideas and plans for much of our life. The specialized leaders who came from these institutions become the trusted leaders in many fields, and the standard they set is determined in the largest part by the standard to which they have been challenged by those institutions. As we support these institutions to the best possible performance, we ensure that our leadership will have the opportunity to develop its fullest.

The same spirit moved Kentucky. Former Governor Bert T. Combs, a member of this Committee, recalled:

> I think the only thing that saved higher education during that period of no system was this spirit of evangelism on behalf, mainly, of the university presidents that higher education was critically important to this state. True, they thought it should come through their respective institutions. But they believed it was important. In the early 60's the people of this state were, reluctantly perhaps, convinced that higher education was important. So we spent substantial money on higher education in this state. It's perhaps true that too much of it went into big buildings and the facilities rather than to improve the faculty and educational instructional process. But there had to be a starting point. Our theory then was that if we built the buildings somebody would fill them. And hopefully capable people. Although we could have done much better, I think we did get the people of this state thinking about higher education and its importance.

Twenty years later a new generation of Kentucky leaders spoke in the same vein. Governor John Y. Brown, Jr. continued to emphasize the value of higher education:

> The excellence of our public and private institutions is central to a growing and expanding Kentucky economy. Without trained manpower new business and industry cannot be drawn to Kentucky.

Governor Brown followed his commitment with an executive budget request that included substantial funding increases for higher education, only to be thwarted by state revenue shortfalls and subsequent state budget cuts.

Southern states surged ahead in support for education in the 1960's and 1970's to make up for generations of neglect. In Governor San-

ford's word, the South was "rising and marching again." Between 1970 and 1980 nine southern states moved into the top twenty in the nation in increased appropriations for education.

Kentucky, however, has not kept pace with some of the other southern states. Table 1 compares the fourteen SREB states on a composite index of state support for higher education. As reflected in this table, Kentucky ranks last among the fourteen states and is one of only five SREB states below the national average. The comparisons in this table are by no means a comprehensive or precise assessment of Kentucky's status. They are, however, a valid indicator of Kentucky's standing in state financial support for higher education in the recent past.

Table 1

State Support for Higher Education in Fourteen Southern Regional Education Board (SREB) States

SREB Rank	State	Composite Index of State Support
1	Texas	142.9
2	Alabama	141.2
3	South Carolina	140.8
4	North Carolina	131.4
5	Louisiana	131.1
6	Mississippi	121.6
7	Arkansas	118.3
8	Virginia	108.0
9	Florida	101.1
	UNITED STATES	100.0
10	Maryland	98.8
11	Georgia	98.6
12	Tennessee	97.6
13	West Virginia	91.8
14	KENTUCKY	91.4

Source: Compiled from the "Fact File," *Chronicle of Higher Education*. October 14, 1980, p. 10. The Composite Index of State Support is the simple arithmetic mean of indices based on the United States average for each of the following four measures: 1980-81 appropriation per capita; 1980-81 appropriation per $1,000 of personal income; two-year (1978-79/1980-81) percentage increase in appropriation; and, ten-year (1970-71/1980-81) percentage increase in appropriation.

In appropriations per capita, which is a general measure for direct comparison of funding levels, Kentucky is tenth among the fourteen SREB states and thirty-second nationally. In appropriations per $1,000 of personal income, which is an indirect measure of effort in tax support, Kentucky is ninth among the fourteen SREB states and twenty-fourth nationally.

In increases in appropriations over the last ten years, Kentucky, although twenty-first in the nation and slightly above the national average, ranked tenth among the fourteen southern states. (See Table 2.) While Kentucky's ten-year increase in appropriations, less inflation, was 62 percent, this increase is deceptive, since no other southern state even roughly similar to Kentucky added two universities during this

Table 2

Ten-year Changes in State Appropriations For Higher Education In Fourteen Southern Regional Education Board (SREB) States

SREB Rank	State	Ten-Year Change in Appropriation: Change	Ten-Year Change in Appropriation: National Rank	Ten-Year Change Less Inflation: Change	Ten-Year Change Less Inflation: National Rank
1	Alabama	+471%	1	+190%	1
2	Texas	+328%	4	+117%	4
3	S. Carolina	+313%	5	+110%	5
4	N. Carolina	+276%	9	+ 91%	9
5	Virginia	+274%	10	+ 90%	10
6	Mississippi	+262%	11	+ 84%	11
7	Tennessee	+243%	15	+ 74%	15
8	Arkansas	+242%	16	+ 73%	16
9	Louisiana	+227%	19	+ 66%	19
10	KENTUCKY	+218%	21	+ 62%	21
11	Maryland	+204%	25	+ 54%	25
12	Florida	+192%	28	+ 48%	28
13	Georgia	+191%	29	+ 48%	29
14	W. Virginia	+189%	30	+ 47%	30
	U.S. Average	+200%		+ 53%	

Source: "Fact File," *Chronicle of Higher Education*, October 14, 1980, p. 10.

period. (In response to dramatic population growth, Texas and Florida added institutions during this period.) During the last decade Kentucky also added significant "noneducational" services that include diagnostic laboratories, neonatal facilities and services, expansion in extension services, hospital expenses, and many others, further diluting the effect of the appropriations increase. This loss in real financial support (less inflation) has been greatly aggravated by recent funding reductions.

In "two-year increase in appropriations," eight southern states rank in the nation's top twenty. Kentucky is last among southern states and forty-sixth in the nation. Kentucky also falls last among southern states and forty-sixth in the nation in "appropriations over the past

Table 3

Two-year Changes in State Appropriations For Higher Education In Fourteen Southern Regional Education Board (SREB) States

SREB Rank	State	Two-Year Change in Appropriation: Change	Two-Year Change in Appropriation: National Rank	Two-Year Change Less Inflation: Change	Two-Year Change Less Inflation: National Rank
1	Louisiana	+43%	2	+21%	2
2	Texas	+41%	3	+19%	3
3	Arkansas	+34%	6	+13%	6
4	Florida	+32%	7	+11%	7
5	S. Carolina	+30%	9	+10%	9
6	N. Carolina	+27%	12	+ 7%	12
7	Maryland	+26%	13	+ 6%	13
8	Georgia	+25%	15	+ 5%	15
9	Tennessee	+21%	26	+ 2%	26
10	Virginia	+20%	27	+ 1%	27
11	Mississippi	+19%	30	+ 1%	30
12	W. Virginia	+15%	42	- 3%	42
13	Alabama	+14%	43	- 4%	44
14	KENTUCKY	+13%	46	- 5%	46
	U.S. Average	+23%		+ 4%	

Source: "Fact File," *Chronicle of Higher Education*, October 14, 1980, p. 10.

two years less inflation," with a 5 percent loss in real dollars, despite Governor Brown's increased support for higher education that was subsequently eroded by revenue shortfalls. (See Table 3.)

Of the southern states, North Carolina has an undisputed reputation for having quality universities. Why is North Carolina successful? Two answers seem apparent: The leadership of North Carolina, at the highest levels in government and business, has made and maintained a firm commitment to improving education. This leadership has used its influence to find the resources to accomplish its goals.

Although North Carolina is half-again larger than Kentucky in total population, a comparison of such characteristics as income, governmental revenues, and demographics reveals striking similarities to Kentucky. The 1980 per capita income in North Carolina was essentially the same as Kentucky's, with each at approximately five-sixths of the national average. The two states were virtually identical in "average effective buying power per household," at about 89 percent of the national average.*

The similarities in income levels are reflected in basically equal governmental revenues in the two states. In the most recent year for which data are available, the total general revenues of all state and local governments was $1,324 per capita in Kentucky and $1,307 per capita in North Carolina, or slightly more than three-fourths of the U.S. average, for rankings among all states of forty-seventh and forty-eighth, respectively.

Further, Kentucky and North Carolina are also very similar in noneconomic characteristics. Both are among the bottom five states in the percentage of the population eighteen or over who are high school graduates (53 percent for Kentucky and 55 percent for North Carolina, versus a national average of 67 percent). Both states have comparably low "college-going rates," each about 25 percent below the national average.

In sum, in such fundamental characteristics as income level, resources available to the government, and levels of educational achievement and participation among the citizens, Kentucky and North Carolina are virtually indistinguishable.

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*These comparisons and those which follow are taken from data in **Rankings of the States**, NEA Research memo (Washington: National Education Association, 1980).

However, when this Committee focuses on the conscious choices made by the two states and their people, there are clear differences between Kentucky and North Carolina. Kentucky spends nearly 60 percent more per capita than does North Carolina on public welfare (with respective state rankings of twenty-sixth and forty-eighth in the nation) and nearly 50 percent more per capita on highways (with respective national rankings of fourteenth and thirty-fourth). Conversely, North Carolina spends nearly 50 percent more per capita than does Kentucky on health and hospitals (with respective state ranks of twenty-sixth and forty-seventh).

The differences in preferences of the two states extend to education, with North Carolina leading Kentucky on most every measure. North Carolina spends 15 percent more per capita than does Kentucky for all education (with respective state rankings of thirty-third and forty-sixth). North Carolina devotes a 17 percent larger proportion of its "total direct state and local government expenditures" to education than does Kentucky for ranks of sixth and thirty-seventh, respectively, and a similarly larger proportion of per capita personal income. North Carolina appropriates 33 percent more per capita than does Kentucky for higher education (with respective state rankings of sixth and thirty-second), with the result that North Carolina's per capita appropriations for higher education are 23 percent *higher* than the U.S. average, while Kentucky's per capita expenditures are some 9 percent *below* the national average. Also, while average faculty salaries at public two-year and four-year colleges in the two states are similar, the average faculty salaries at the principal public universities differ significantly: North Carolina ranks sixteenth nationally, and Kentucky ranks thirty-second.

Finally, there are significant differences between North Carolina and Kentucky in the amount of private contributions to public higher education, a source of support that a distinguished former president of a leading public university has described as "the margin for excellence." In 1978-79 the total of private contributions to the University of North Carolina at Chapel Hill was more than twice as large as the total to the University of Kentucky. In the context of enrollment, the total private support per student of $454 in North Carolina was two and one-half times larger than the per student total of $185 in Kentucky.

Having explained the present financial condition of higher education in Kentucky, we now turn to our views of what must be done about it.

Committee Recommendation on The Financial Needs of Higher Education

For a state to remain competitive in fields of worthwhile endeavor, it must project both an image and the substance of progressive programs and innovative leadership. Neither the image nor the substance can be projected without the existence of a system of higher education that strives for and attains a level of excellence. For example, a state cannot expect to compete for new industry without an adequate system of higher education. Industrial leaders seek out those states that excel in research programs and provide a challenging climate for business and intellectual leadership.

Under current conditions, Kentucky is headed toward a crisis in financing higher education, a crisis that could frustrate hopes for the improved quality of life Kentuckians have a right to expect for their children. Without either substantial increases in appropriations or changes in the system of higher education, or both, Kentucky cannot hope to support the higher education system it now has, much less aspire to improve it. Kentuckians must be asked to face a clear choice between improvement or continued deterioration.

For the good of Kentucky, this trend must be reversed. Kentucky's system of higher education must be of sufficient quality that it can lead the state successfully into an age of intensely competitive economic, technological, and social change. If quality is Kentucky's aim, the system cannot be sustained with its present resources. The state, its leaders, and its people must choose either:

- To permit the present trend to continue and accept deteriorating quality, or
- To consider the existing, deteriorated position of higher education a low point from which the downward trend will be reversed—a new beginning from which to provide adequate financial support for a cost effective, high quality, higher education system.

This Committee unanimously recommends the second alternative, that which leads to higher quality higher education.

What will be required to reverse the trend of financial loss, to improve quality, and to shape the future? Strong and creative leadership will be required. The support of a knowledgeable public and greatly improved cooperation among all institutions of higher education will be required. A tough but fair minded analysis of existing programs and costs will be required.

The essential requirement for the new beginning will be more money aimed at improving higher education, not expanding it. Expenditures for higher education are investments, not costs. These investments reap dividends for the people of Kentucky by expanding and enhancing human capital and by encouraging economic development through research.

Improvement must come from the judicious use of the resources Kentucky now has, from continuous pruning of programs that have outlived their usefulness, and from an absolute increase in the state appropriation to higher education.

Universities must also cooperate in a clearly defined system of higher education. Positive and creative leadership must come from the Council on Higher Education, from university presidents, and from boards of trustees and regents. They must reevaluate programs and initiate more effective and creative approaches to making improvements. Unnecessary programs and services must be reduced and eliminated, and resources must be reallocated to support more effective or more innovative programs. This report suggests a reform program to begin this process. Opposition from those who believe that reform and innovation are impossible or that tradition, political obstacles, or contractual obligations are impenetrable must be overcome.

Second, more money will be required to increase the quality of higher education. The amounts needed may be large, but this Committee looks beyond the current biennium and into the next decade.

One way to estimate the need for additional money is to set as the minimal goal the return of higher education funding to its 1971-72 level. If the number of campuses was now exactly as it was prior to 1970-71—six—it would take some $40 million to return to the 1971-72 funding level. This figure is a conservative estimate, adjusted only for inflation and enrollment increases, and does not account for increases that were necessary but not provided in the budgets for the University of Louisville and Northern Kentucky University, both of which entered the system by 1970. Further, this amount does not include funds for the numerous new noneducational services that have been added

to higher education's responsibilities—diagnostic laboratories, neonatal care, agricultural expansion, increases in hospital expenses, and more—during the past decade.

In reality, while Kentucky made a necessary and substantial commitment to expanded access to public higher education for the citizens of Louisville and northern Kentucky, financial support did not follow this commitment. Having carried out this commitment to expanded access, Kentucky must now make an equally firm commitment to increased quality.

There is another way to look at the need for new funds. If Kentuckians were to strive, for example, for a commitment to higher education comparable to that of North Carolina, comparable resources would be required: the "means" must suit the "ends." If Kentucky appropriated funds for higher education comparable on a per capita basis to those appropriated in North Carolina, it would have appropriated $96 million more than its actual 1980-81 higher education appropriation. This Committee mentions this figure only for the sake of comparison. We believe the immediate infusion of a sum of this magnitude is unrealistic and impractical but could be seen as a goal to strive for in future years. Even if heaven cannot be reached in a single bound, it is time to take the first step.

Experience has proved that the people of Kentucky are more willing to sacrifice for the education of their children than for any other program. The governor of the state is charged under the Constitution with making recommendations to the Legislature, and Governor John Y. Brown, Jr. carried a message of support for higher education to them in 1980. This Committee believes that the Governor should now fully explain to Kentucky's legislators and the people they represent that without increased appropriations, our system of higher education will inevitably deteriorate and cause irreparable injury to the state. We believe that if this message is taken to the people of Kentucky, they will respond.

Because of the nation's present economic situation and its impact on Kentucky, state government now receives reduced revenues and, hence, must reduce expenditures to achieve a balanced budget. This Committee understands this situation. We also understand the existing political and economic climate. Now, as in former times, taxpayers want to pay less rather than more taxes. At the same time, the people of Kentucky have many needs, and higher education is only one among them.

Knowing these facts, we nonetheless feel that an effort must be made to increase state appropriations to higher education. If this cannot be done immediately, a goal for the future must be set.

Recommendation

We therefore recommend that the Council on Higher Education ask the Governor to appoint a task force to devise methods of increasing appropriations or revenue for his consideration. The findings of the task force should assist in his decision to ask the Legislature to act to increase revenue or appropriations in 1982.

III
The Conclusion

THE PRICHARD COMMITTEE on Higher Education in Kentucky's Future has recognized that through the years, each of the institutions of higher learning in Kentucky has developed autonomously. Without coordination of efforts and activities, autonomous development in the future will cause tensions as the institutions compete for the finite resources available for higher education. This Committee feels that these resources must be used in the best interests of the students, the institutions, and the taxpayers, and that tensions must be relieved through cooperative and coordinated efforts. The Council on Higher Education is in place. If it fails to coordinate the various parts of our system of higher education in a positive, forceful, and innovative manner, then there is danger of more direct state government control over Kentucky higher education. We do not propose a monolithic system, nor do we propose a movement toward a singly governed system of higher education. We do propose that the Council aggressively implement its coordination role and that the institutions quickly and creatively escalate their cooperative efforts with one another in a system of higher education.

The Council has all the statutory tools it needs to mount an aggressive campaign to move a maturing public higher education system into the next decade. It has the authority and expertise to determine needs, require coordination, encourage cooperation, stifle unhealthy competition, remove unnecessary duplication, and assist, in a positive and progressive way, in the planning for a strong and vital public higher education system. The Council can and should provide the spotlight of public scrutiny on university governing boards, administrations, and faculties, challenging them to redouble their efforts toward educational quality. The universities must fulfill their individual roles and responsibilities, but always in full recognition of the purpose of the larger system of higher education.

This Committee understands the political implications of many of the decisions the Council must make. We compliment the Council for its efforts in recent years to rise above such pressures. In addition, we exhort the Council to hold paramount at all times the notion of a quality system of higher learning and its responsibility toward that end.

We have put together recommendations and rationale that range from simple, straightforward statements to more complex and difficult propositions. Many of our concerns require additional study by the Council and its staff in cooperation with the universities. Although our ideas in this report do not speak to every possible future issue, we feel that this document can serve as the framework within which the maturing process of Kentucky's public higher education system can best take place. If this document is placed on a shelf, our work will have been in vain.

To reiterate the views of this Committee, we believe that financial resources for higher education are an investment in the human capital of the future. From this investment, Kentuckians expect the return to be public higher education of the highest quality attainable. Investments in higher education are the seed corn for the future of the Commonwealth and its people. Over the last decade, as real financial resources for higher education dwindled, Kentucky began to consume its seed corn. We believe that it is absolutely imperative that this trend be stopped and that this can be done through better stewardship, through reallocation, and through increased financial resources.

Therefore, we ask that the Council on Higher Education and its staff consider this document boldly, wisely, and nonpolitically. It is imperative that the Council be instrumental in assuring the highest quality investment possible in the future of this Commonwealth—an investment in her people. It is time for Kentucky to move ahead.

The Prichard Committee
On Higher Education in Kentucky's Future

Minority Statements On Legal Education

A MINORITY STATEMENT ON LEGAL EDUCATION

In the overall review of recommendations made by the subcommittees of the Committee on Higher Education in Kentucky's Future, terms such as "encourage," "make special efforts," "move toward," "emphasize," and "adequately reflect" are used frequently. The Committee also believes that with the proper attention on the part of the Council on Higher Education, the Council staff, the individual university presidents, and the university faculties, it will be possible to achieve a responsible and equitable system of higher education for every citizen seeking admission, even to the point of making up for inadequacies in previous educational experiences.

The Committee has examined, discussed, and chosen to make no statement regarding Kentucky State University, upon learning that Federal mandates must be met immediately. Similarly, the Committee considered the question of the production of dentists in the state, and, upon learning that a current study is in progress by the Council's Academic and Health Affairs staff to produce a report in October, 1981, recommended careful consideration of this study. After examining the medical school situation, the Committee recommended the establishment of a goal to balance, in the near future, the number of medical school graduates with the number of residency positions available and filled. In the matters of master's degree programs and research programs and facilities, recommendations were for the avoidance of duplication where possible and for the consolidation of resources emphasizing statewide cooperation.

How, then, can the Committee propose the elimination of one law school? No other proposal comes with such a negative tone. From materials presented, it is evident that Kentucky has, for the present market, created the educational opportunity for an overabundance of

master's, medical, dental, and legal degrees; but just how can the Committee, which has been examining all aspects of the higher educational system, single out only one division, a law school, to be removed from the system? Concern was expressed for the many agricultural schools, but no mention was made of eliminating one of them.

Should not the Committee recommend to the Council that a study be made to determine how to limit enrollments in the various law schools in order to achieve the number of graduates that can best serve the Commonwealth? The Committee could be seen to be doing itself and the entire package of proposals a disservice by taking this one strong negative position.

Respectfully submitted,

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Henry M. Mann
C. Waitman Taylor, Jr.
Lois C. Weinberg

A MINORITY STATEMENT ON LEGAL EDUCATION

At its August 16, 1981, meeting, this Committee accepted the subcommittee recommendation that one of the state's three law schools be closed. The Committee recommended *closing* a law school, yet only recommended a *reduction in enrollment* in the state's medical schools and recommended careful consideration of a recent Council study of dental education in Kentucky. Therefore, the signatories to this report believe that the recommendation to close one of the state's law schools is inconsistent with the approach the Committee has taken to the Commonwealth's other professional schools and that the problems attendant to closing a law school raise serious questions which must be resolved before a rational decision concerning elimination of a law school can be made.

Among the questions which have been raised, and in our view, not sufficiently addressed, are the following:

1. Should the Council on Higher Education study enrollment in law schools, thereby making the approach consistent with the approach of the Committee to other professional schools?

2. Is there a sufficient data base upon which to conclude that there are, or will be, too many lawyers in the Commonwealth?

3. Are there recommendations which should be made concerning how the law schools may strengthen their programs and integrate their curricula into other academic fields such as business and finance?

Therefore, the purpose of this minority report is to analyze these questions with a view toward whether the Committee's recommendation to close a law school is an adequate resolution to the problems posed by such questions.

(1) Should the Council on Higher Education study enrollment in law schools, thereby making the approach consistent with the approach of the Committee to other professional schools?

This Committee's recommendation to close a law school, while continuing to study enrollment problems in medical and dental schools, is a source of concern. As *The Louisville Times* has noted, unlike medical and dental schools, the problem of enrollment in law schools need not be bogged down in discussions of cost-cutting. As Dr. Donald Swain, president of the University of Louisville, stated, the cost of running a law school is nothing compared to the cost of operating a medical school. Once buildings are erected, the primary costs are for books and salaries. Thus, law school enrollment problems should be approached on an educational rather than an economic level.

Other than the report of Professor Leslie Abramson of the University of Louisville School of Law, which will be dealt with at length herein, the Committee has been presented with no information concerning an alleged lawyer surplus that is so immediate as to justify closing a law school in the absence of a thorough study of law school enrollment problems.

As the Committee charged with making recommendations which will affect Kentucky students for the next generation, it is of paramount importance that all problems be raised and studied and that

hurried judgments be avoided except in the most exigent circumstances. We do not believe that this Committee has been presented with facts showing such an exigency as would warrant the closing of a law school. Moreover, even assuming that a lawyer surplus exists in Kentucky's larger cities, a study should be undertaken to determine whether the more rural populations of Kentucky are adequately served by the number of practicing lawyers and if not, continued efforts to deal with a shortage of lawyers should be urged in the same manner as the Committee urged efforts to deal with the shortage of doctors in rural areas. Surely, before recommending the closing of a law school, a study should determine whether a worthy future role for each of the state's law schools may be found with the result being that each law school would no longer offer a curriculum identical to those of the state's other law schools.

Further, even assuming too many lawyers, *current* projected population and economic data should be analyzed to determine whether there will be fewer law school applicants in the future. If so, law schools should be urged to reduce the number of freshman seats available to adequately maintain admission and accreditation standards. Many law schools, including Chase Law School, Northern Kentucky University, have been limiting enrollment for the last several years anticipating a decline in future applicants.

In summary, the Committee owes its members, the administration, and above all the citizens of the Commonwealth a duty to avoid precipitous decisions affecting law schools when all problems and the potential solutions to them have not been analyzed.

(2) Does the Committee have a sufficient data base upon which to conclude that there are, or will be, too many lawyers?

At the outset, it should be noted that there is a substantial philosophical disagreement among the members of the Committee with regard to whether the enrollment policies of the state professional schools should coincide with the state's manpower needs instead of students' desire for medical, dental, or legal education. To argue that opportunities for higher education should be limited to the extent that Kentucky can utilize those graduates represents a fundamental shift in philosophy in a state which has for many years attempted to strengthen its higher education programs and the leadership potential of its graduates. Reducing the opportunity for Kentucky residents to attend

law school in the Commonwealth's educational system will be effective only to the extent that it deprives the poor of the opportunity to obtain a legal education. Persons of means will be able to obtain a legal education elsewhere, although at a substantially increased cost.

Even with that philosophical difference in mind, the question of whether there are or will be too many lawyers in the state deserves further attention. It is submitted that Professor Abramson's report, standing alone, is insufficient to answer this question. First of all, the report is now some seven years old and places reliance on other works dating back to 1965 and 1970. Furthermore, the report itself urges conducting additional studies to test the accuracy of its population projections and related factors. For purposes of illustrating the need to update the Abramson Report, it noted in 1974 that Floyd and Pike Counties were projected to lose population in upcoming years whereas figures from the 1980 U.S. Census reveal that these counties actually experienced a 41 percent and 33 percent increase in population, respectively. Most saliently, the Abramson Report relies on a 1965 study in projecting the types of lawyers for which there may be a demand and relies heavily on only those areas of traditional law practice (divorces, personal injury, criminal) in projecting anticipated needs for lawyers.

According to figures recently released by the National Association for Law Placement, more than 46 percent of all 1979 law graduates entered law-related fields other than private practice. Approximately 34 percent of these graduates entered government service, public interest-public service positions, and academic careers and military service or took positions with business concerns. The Association's report also notes that these figures have remained relatively stable for the past five years. In contrast, Professor Abramson's report, estimating the number of Kentucky law school graduates who will practice in the state, is based on figures gleaned from the 1969 and 1970 graduating classes and does not account for the increase in the number of law graduates going into business, education and government concerns during the last decade. Nor could the report have anticipated the number of lawyers who would be required to deal with the vast increase in administrative law practice which has come during the past decade as a result of federal and state regulations.

Moreover, Profesor Abramson's report assumes an ideal lawyer population ratio of 1:1,000, which is half as many lawyers as are utilized when compared to the population nationally and almost 25 percent fewer lawyers than the state was utilizing in 1970 when the law-

yer population ratio was 1:831. Further, Table 1 of Professor Abramson's report indicates that only twice during the last century has Kentucky had so few a number of lawyers per population as 1:1,000. Thus, the Abramson report, projecting the number of lawyers needed by the year 2000, assumes almost 25 percent fewer lawyers per population than Kentucky has historically utilized, not to mention what it may be capable of utilizing in the future.

Finally, an attempt should be made to ascertain the number of graduates each Kentucky law school is contributing to the total number of practicing lawyers. Figures from the most recent edition of Martindale-Hubbell Legal Directory indicate that during the period 1973-1980, 787 Kentucky practitioners graduated from the University of Kentucky, 725 graduated from the University of Louisville, and 211 graduated from the Chase College of Law, Northern Kentucky University.

Also, it should be determined whether the three state law schools are making an effort to provide practitioners to counties where there is a low lawyer population ratio. It is believed that there are still many areas of eastern and far western Kentucky which are unserved by an adequate number of lawyers.

At a minimum, the foregoing analysis indicates the Committee recommendation to close a law school is based upon data which was not current, assumptions not borne out by facts, and rigid calculations of how many lawyers might be able to make a living in a strictly traditional law practice. It can be argued that even in the area of traditional law practice, there is a burgeoning and untapped market of consumers of legal services in the form of middle-class families who are not sufficiently impoverished to qualify for free legal services yet not affluent enough to pay high legal fees. Prudential Insurance Company, among others, is marketing prepaid legal services plans which utilize group insurance concepts to spread the costs of legal services among all subscribers. At present, there are approximately 5,000 such legal-service plans covering approximately five million workers and their families. This market is expected to cover 20 million families by 1985. Consideration must be given to this present and potential market in any attempt to adequately ascertain the needs for lawyers in the traditional practice of law.

(3) Are there recommendations which this Committee can make concerning how the law schools can better integrate their curricula

with other disciplines such as business and finance and strengthen existing programs?

The chairman of this Committee has stated that legal research in Kentucky has been inadequate. It would appear that this problem can be substantially solved if the three state law schools take advantage of declining enrollments to increase the time faculty members have to devote to legal research. Also, smaller numbers of students would increase the time students can spend with law faculty and benefit from such increased research. By the same token, this would allow more of the resources of the law schools to be directed towards the creation of master's of law programs and combination J.D./M.B.A. or engineering degrees.

If one law school is eliminated and if the other two law schools are forced to revise their curricula to accommodate reduced opportunities for legal education, as has been suggested, it can hardly be said that the remaining two law schools will be able to strengthen their legal research functions while having to educate more students. To the extent possible, the library and faculty resources of the law schools should be integrated into the total structure of the universities, therby allowing graduate and undergraduate students in other disciplines an opportunity to be exposed to specialists in various areas of the law which will bear upon their pursuits upon graduation. As our societal and economic structures become more complex, all disciplines are compelled to stay abreast of the myriad changes in our legal and regulatory structures.

To close one state law school deprives at least one university of the opportunity to be creative by melding its legal education resources into traditional nonlegal curricula. Therefore, this Committee must consider the fallout effect of closing a law school on the entire affected university and what such a measure would mean for other graduate as well as undergraduate programs.

Conclusion

Thus far, insofar as legal education is concerned, the Committee has only concerned itself with whether there are too many lawyers in the Commonwealth. As indicated, its conclusion in that regard is questionable. Moreover, it has not been demonstrated that closing a

law school will remedy that problem, if in fact such a problem does exist. Had the Committee concerned itself with the broader range of questions facing legal education and used *current* data to analyze those questions, such data would point to better solutions than merely eliminating a law school. As a result, the Committee has yet to fulfill its role of providing meaningful input concerning the mechanisms by which the law schools can better serve their public function.

Therefore, this minority report is filed to call attention to areas not adequately addressed, if in fact they were addressed at all, by the subcommittee making the recommendation that one law school be closed.

Respectfully submitted,

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